**RCA**

# 3MP SUPER HD SECURITY
## AND DVR SYSTEM
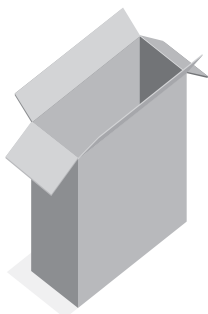
## User Guide

# Contents

# GETTING STARTED
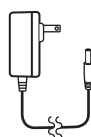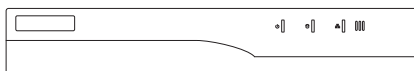
## Step 1: Unpack

**(1) DVR Box**

(1) 2TB HDD Digital Video Recorder

(1) Power Adapter
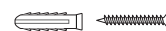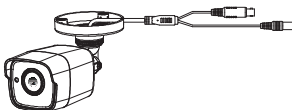
(1) HDMI Cable

(1) Ethernet Cable

(1) Mouse

**(4) Camera Boxes**

(1) 3MP HD Indoor/Outdoor Security Camera

(3) Mounting Screws and Anchors

(1) Mounting Template

**Plus Additional Cables and Hardware**

(4) 60ft BNC Cables

(1) Camera Power Splitter

(1) Power Adapter

(1) Quick Start Guide

# Step 2: Mount the cameras

**Note:** These security cameras can be both wall- and ceiling-mounted. The installation instructions that follow are for ceiling mounting, but they can be adapted for wall mounting as well.
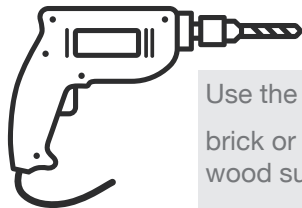
1. Apply the mounting template sticker to the ceiling where you want to mount the camera.

**Drill Template**
Screw hole All : for integrative bracket

2. Mark the location for the mounting holes.
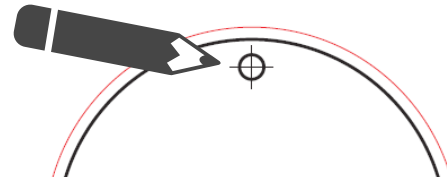
3. Drill screw holes (labeled 1 on the template) and the cable hole (if desired, labeled A) where marked.

Use the following drill bit sizes:

brick or stucco = 7/32"
wood surface = 1/16"

4. Route the cables from the camera through the cable hole or through the side outlet on the camera base.

Side outlet
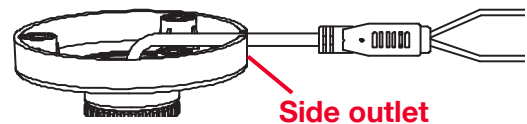
5. Secure the camera to the ceiling or wall with the supplied screws (and anchors, for brick or stucco).
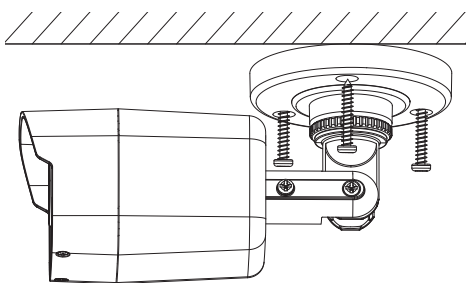
6. Adjust the camera's position to get the angle you want.

Base ring (pan)

Camera screw (rotation)
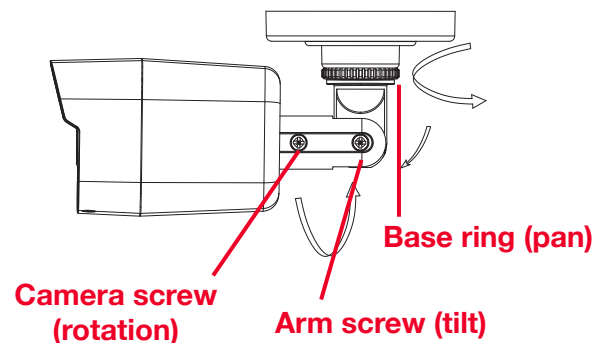
Arm screw (tilt)

For pan adjustment: Loosen the base ring and pan up to 360°. Tighten the base ring when you have the camera panned the way you want.

For arm tilt adjustment: Loosen the arm screw and tilt the arm up to 180°. Tighten the screw when you have the arm in the position you want.

For camera rotation adjustment: Loosen the camera screw and rotate the camera up to 360°. Tighten the screw when you have the camera in the position you want.

**Make sure the base ring and adjustment screws are tightened all the way for each camera before proceeding.**

# Step 3: Connect cameras to the DVR

1. Find the cables coming from each camera. Match the video and power cables to one end of a BNC cable and connect them.
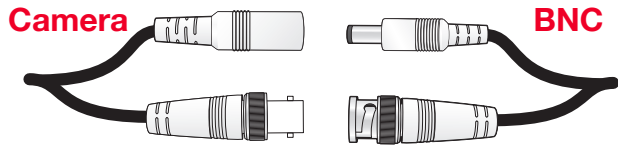
2. Plug the video output cable on the other end of this BNC cable into one of the VIDEO IN jacks on the back of the DVR.

**Camera**            **BNC**

**DVR back panel**
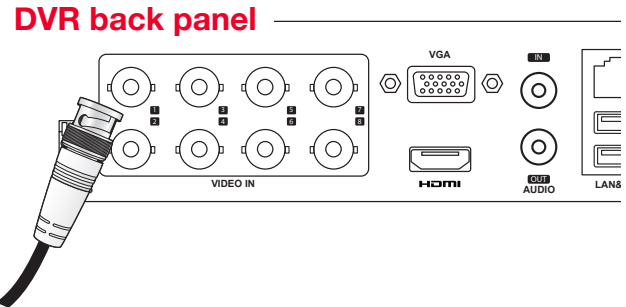


3. Plug the power input cable on the other end of this BNC cable into the camera power splitter.
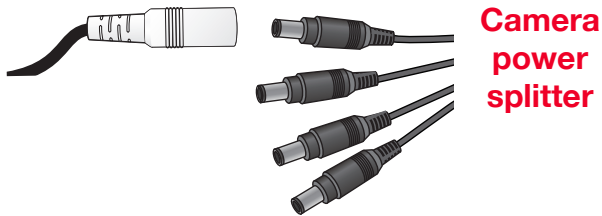
4. Repeat for the other three cameras.

**Camera power splitter**
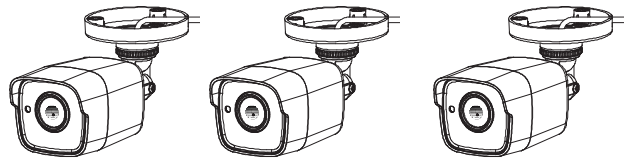
5. Connect the power splitter to the camera power adapter.
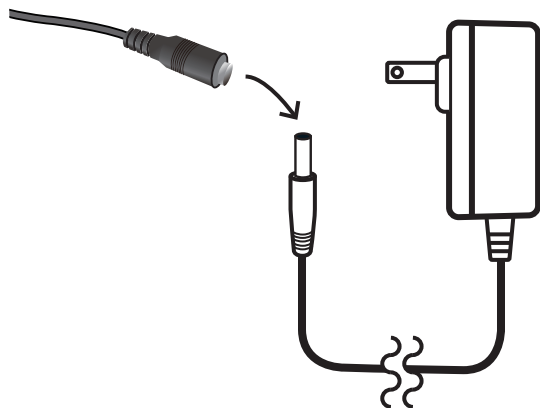
6. Plug the camera power adapter into a working outlet or surge protector.

**Camera power adapter**
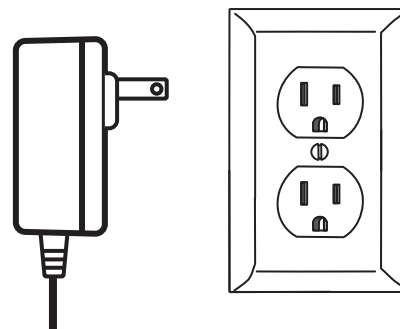
# Step 4: Connect the DVR to home network

**1.** Plug one end of the supplied network cable into the top **LAN&USB** port on the back of the DVR.
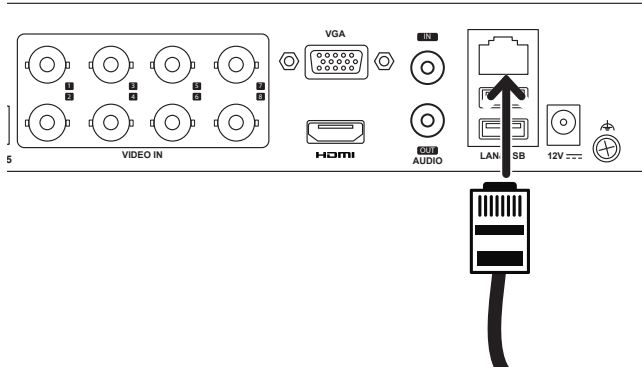
**2.** Plug the other end of this network cable into an open port on the back of your network router.



**Router back panel**
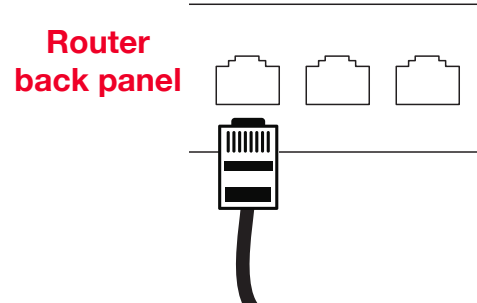


# Step 5: Connect the DVR to your TV/monitor

**1.** Plug one end of the supplied HDMI cable into the HDMI jack on the back of the DVR.
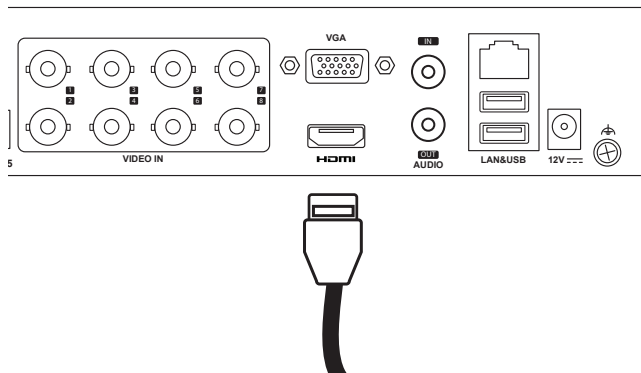
**2.** Plug the other end of this HDMI cable into an open HDMI jack on your TV.



**TV**
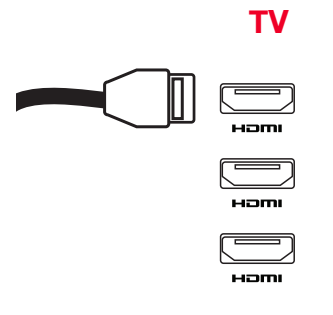


Note: When you turn the DVR on, you'll need to use the INPUT or SOURCE button on your TV's remote to tune to the input you plugged the DVR into.

## Optional connection: VGA to monitor

You can also connect the DVR to a VGA monitor. Plug one end of a VGA cable (not included) into the VGA jack on the back of the DVR. Plug the other end into your monitor.

# Step 6: Power and turn on the DVR

1. Plug the AC adapter into the 12V jack on the back of the DVR.
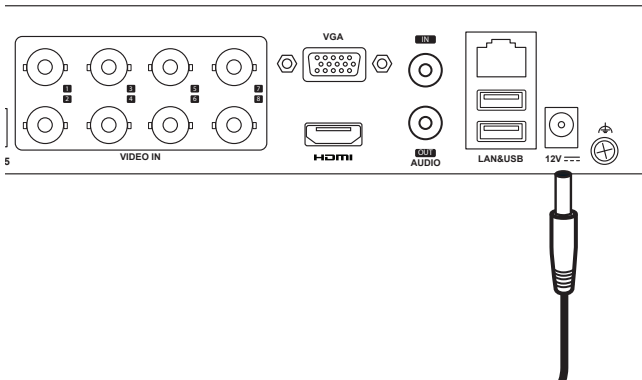


2. Plug the other end of the adapter into a working outlet or surge protector.
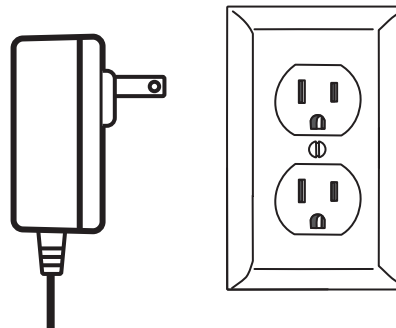


The ⏻ indicator on the front panel of the DVR is green when the unit is plugged in. This means the DVR is on!

# Step 7: Activate your DVR

1. Plug the included mouse into one of the USB ports on the back of the DVR.



**IMPORTANT:** Make sure your TV or monitor is tuned to the correct input to view the signal from the DVR. Also make sure that the ⏻ indicator on the front of the DVR is lit.
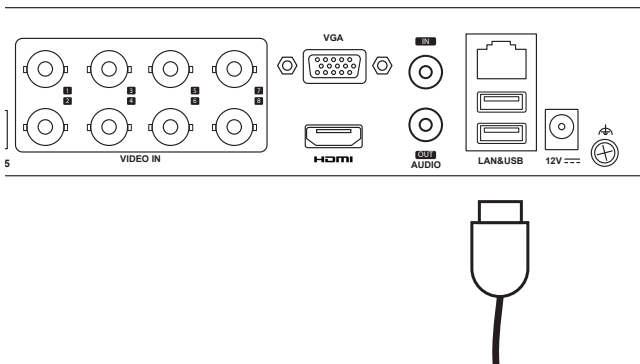
2. The first time you turn it on, the DVR asks you to activate the system by creating an admin password. You must create a password in the step in order to use the system.



**Click on each field and use the on-screen keyboard to enter your password in the Create New Password and Confirm New Password fields. Then click OK to save the password and activate the device.**

**IMPORTANT:** Make sure you remember your password! You might want to save it to a USB drive in the next step, as a physical key in case you forget.

3. The next screen lets you save your password to an external USB drive (like a thumb drive) so that you can unlock the system if you ever forget the password.
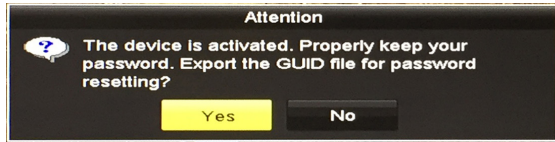


If you'd like to do this, insert a USB drive into the available USB port on the back of the DVR. Then press Yes in the dialog box shown here and follow the on-screen instructions to proceed.

Otherwise, click No to continue.

4. Set up a pattern to unlock the device. Use the mouse to draw the pattern you want (click to draw, release when you're finished).
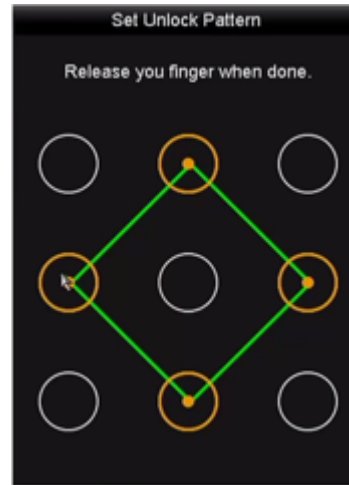


**Note:** You must use at least 4 dots in your unlock pattern.

Draw the same pattern again to confirm it.

5. Next, select the language you want to use for setup and menus on the DVR. Click Apply to proceed.
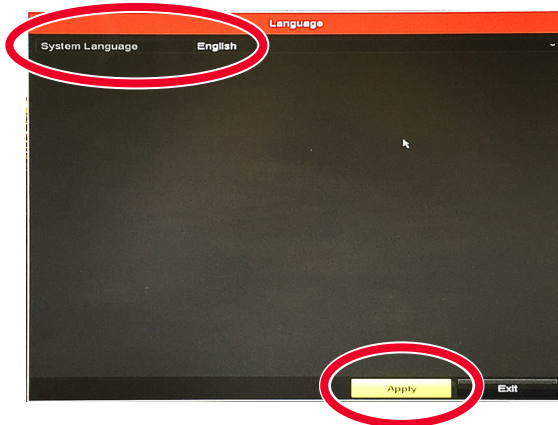


6. Select the Start Wizard option and click Next to launch the Start Wizard.
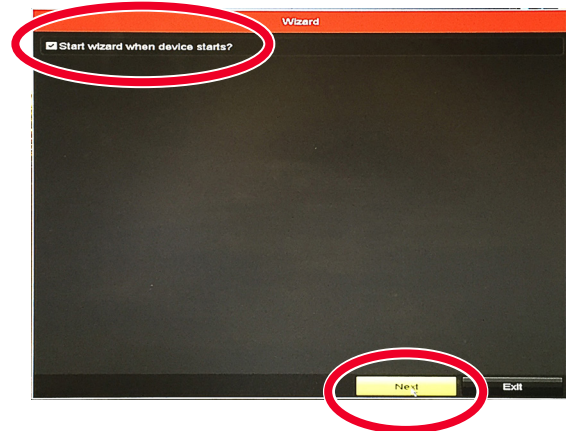
# Step 8: Follow the Start Wizard steps

1. Click on the Time Zone, Date Format, System Date, and System Time fields to make changes. Click on Next when you're done.
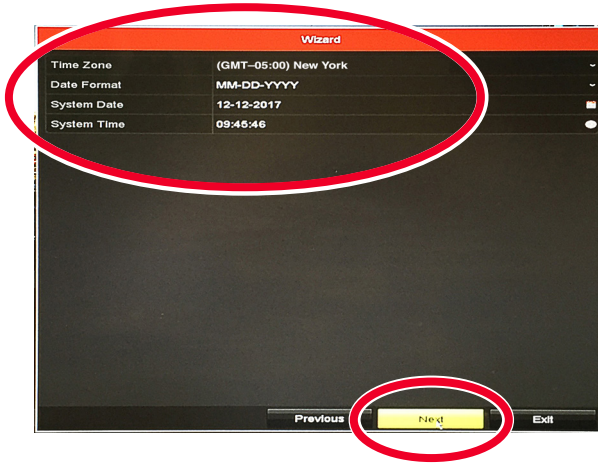


2. In the next screen, confirm that your network settings are correct. Then click Next to continue.

**Note:** Don't make changes to this screen unless you're certain that you need to!
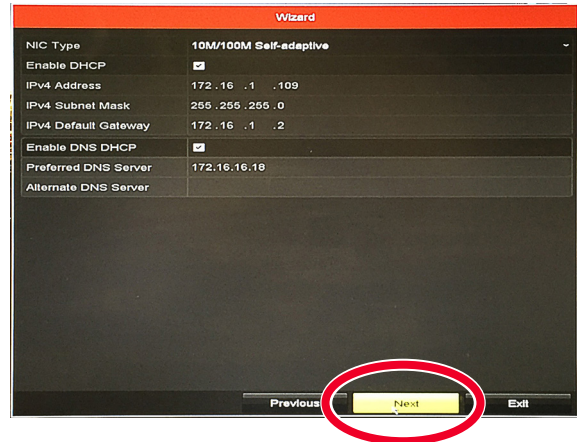


3. In the next screen, click the box next to Enable to set up the DVR for use with the RCA Security App on your phone.
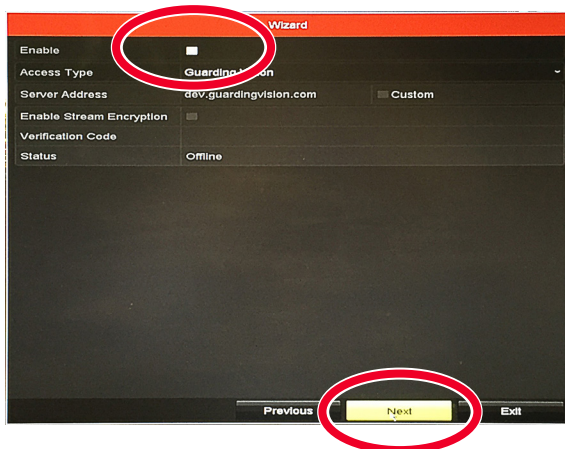


4. The next screen asks you for a verification code and to agree to the terms of service.
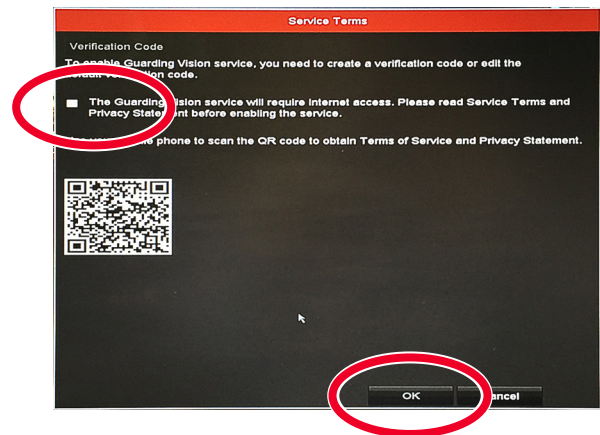


Click in the Verification Code field and use the on-screen keyboard to enter your verification code.

Then tick the box next to the terms of service and click OK.

**Keep this screen in front of you and go to the next step to set up the App!**

# Step 9: Download and set up the App

1. **In the Google Play or Apple App Stores, search for "RCA SECURITY" and look for the icon shown here. Then download and launch the App.**



**Minimum Operating System Requirements for the RCA Security App**
- iOS 7 or later
- Android version 4.4 or later

2. **Register your App and set up your RCA Security account (if you don't have one already).**
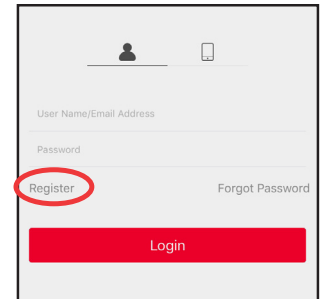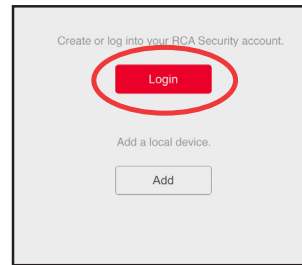


The first time you launch the RCA Security App, you'll need to create a user name and password so that you can access your camera securely.

Press the **Login** button to start, then press **Register** on the screen that follows.

---

3. **Get a verification code for the App.**
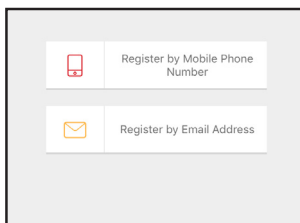


You can register by mobile phone number or by email. The App will send you a verification code to link this number or e-mail address with your account. Follow the steps in the App to proceed.

4. **Create a user name and password and press Finish.**



---
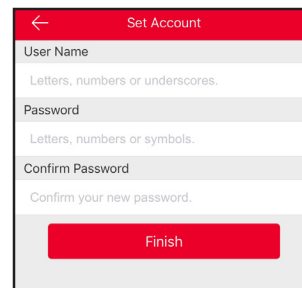
5. **Tap the + symbol in the middle of the App screen to add the security system.**
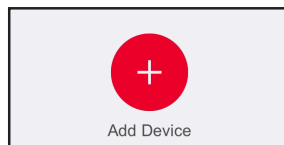


6. **Scan the QR code on your monitor or TV screen.**
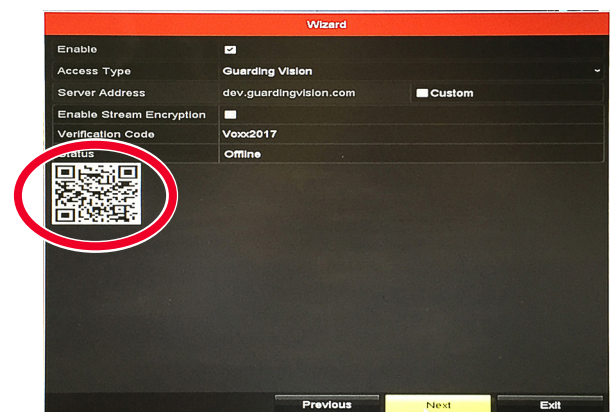
**7.** The App will identify your system by this QR code and show its serial number. Press the Add button in the App.
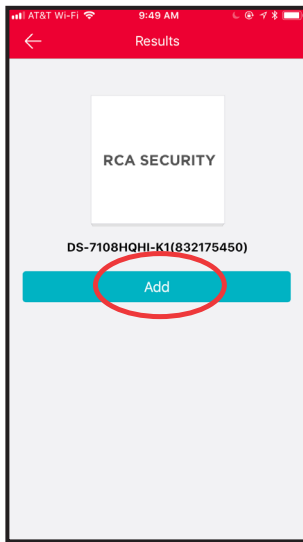


**8.** In the next screen, enter the Verification Code from the monitor in the App and press OK in the App.
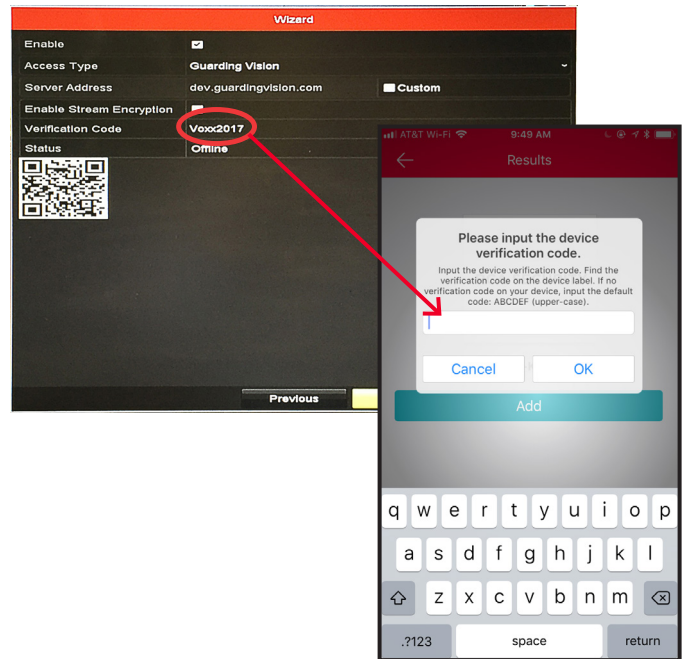


**9.** Press Connect to a Network in the next screen of the App, then choose Wired Connection.
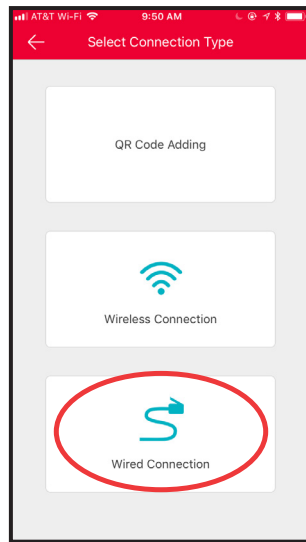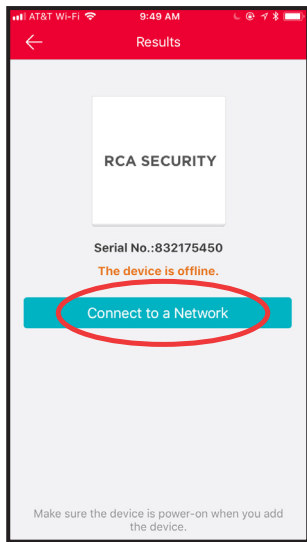


**10.** The next screen asks you to confirm that the DVR is connected to your router. Press Connected and Next to continue.
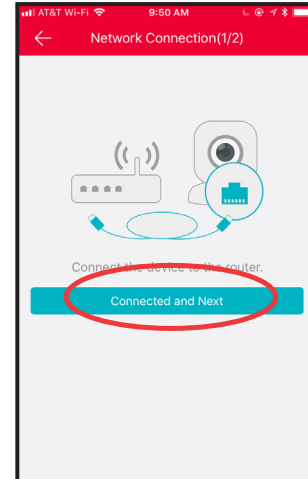


The App starts connecting, then asks you to enable the RCA Security Service. **Press Next to continue.**
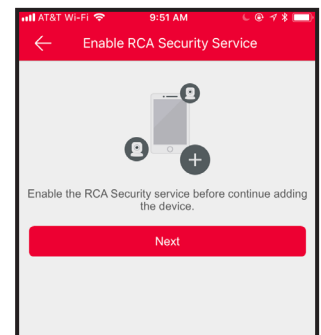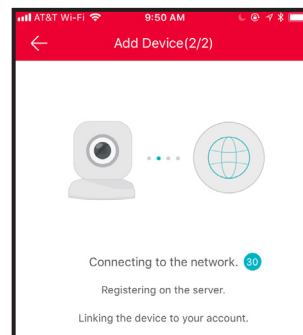
**11.** Enter the Admin password you used to activate the system (see page 6) in the App to verify the device.
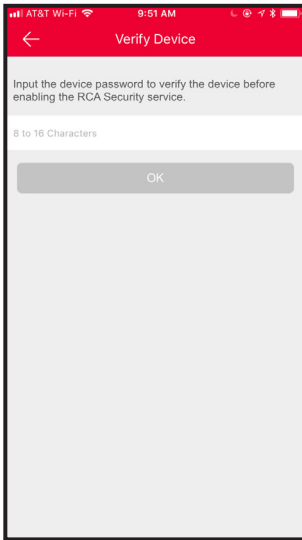
**12.** When the App is finished adding the device, it shows you network information. Press Skip to complete App setup.

| | |
|---|---|
| ← | Verify Device |

Input the device password to verify the device before enabling the RCA Security service.

8 to 16 Characters

OK

| | |
|---|---|
| ← | Adding Completed |

| | |
|---|---|
| Alias | DS-7108HQHI-K1(832175450) |
| Device Domain Name | 832175450 |
| Port Mapping Mode | Automatic  > |
| Server Port Number | 8000 |
| HTTP Port Number | 80 |
| User Name | |
| Device Password | |

After setting the parameters above, the system will directly connect the device.

Finish

Skip

Edit parameters in Device Information page.

# EVERYDAY USE

## User Login

Every time you turn off the system or log out, you must log back into your security system.

1. Select a User Name from the drop-down list.

2. Input your Password.

3. Click OK to log in.

*Note: If you enter the wrong admin password 7 times, your account will be locked for 60 seconds. If you enter the wrong user password 5 times, the account will be locked for 60 seconds.*

## User Logout
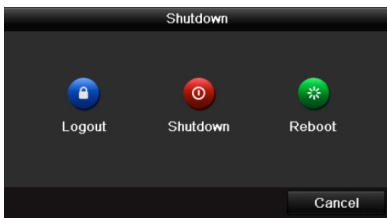
1. Go to Menu > Shutdown.

2. Click Logout.

When you log out, the monitor goes to the live view mode. Before you can perform any operations, you'll need to enter your user name and password to log in again.

### Resetting Your Password

If you forget the admin password, you can reset the it by importing the GUID file you exported and saved on a USB flash drive when you activated the device (see page xx for more information).
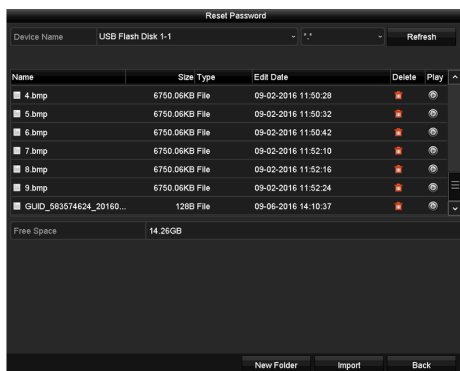
1. On the user login screen, click Forget Password to go to the Import GUID screen.

2. Select the GUID file from the USB flash drive and click the Import button. The Reset Password screen appears.

3. Input the new password and confirm it.



4. Click OK to save the new password. The Attention dialog box pops up as shown here, reminding you to export the new password to your USB thumb drive. Click OK to export the new password.



5. Click OK and a second Attention dialog box appears to remind you to duplicate the password of the device to IP cameras that are connected with default protocol. Click Yes to duplicate the password or No to cancel it.

# LIVE VIEW

The viewing screen on your monitor or App is the gateway to everyday use of the RCA Security System. This section gives you a tour of the viewing screen and menus.

## Monitor Live View

Each channel offers a live view, with alert/status icons that notify you of what's going on.

**Alarm** (video loss, tampering, motion detection, VCA or sensor alarm)

**Recording** (manual record, continuous record, motion detection, VCA or alarm triggered record)

**Event/Exception** (event and exception information, appears at the lower-left corner of the screen.)

## App Live View

The App shows you views for all your active cameras. Press on one to go to a live view of that camera.

(Back) goes back to the device list screen.

(Timeline / Playback) accesses any content stored on the DVR. Press this icon to start viewing or downloading motion/sound-activated videos or images.

(Settings) accesses the Settings menu.

Camera view shows you the image from this camera. Turn your phone/tablet sideways to take over the entire screen.

(Stop) and (Pause) stops/starts or pauses the live video.

(Sound On/Off) turns the sound from the camera on and off.

(Zoom) zooms in on the live view.

(Snapshot) takes a still photo of the camera video. The snapshot file is saved to your smartphone or tablet.

(Record) starts/stops recording video. The video file is saved to your smartphone or tablet.

**1 / 4 / 9 / 12 / 16** (Multi-Camera View) lets you see multiple cameras at once on a single screen. Press the number you want to access a multi-camera view screen.
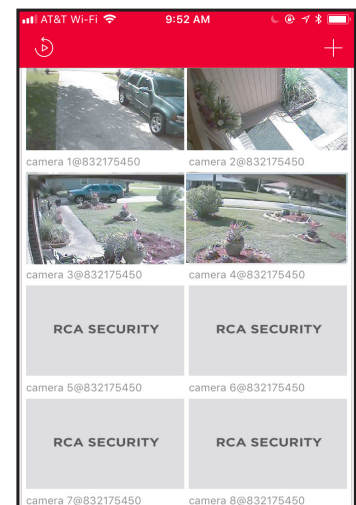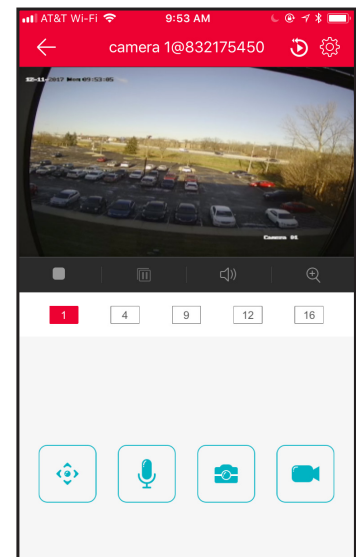
# Operations in Live View Mode

Live view mode offers the following functions:

- Single Screen: shows a single camera on the monitor.

- Multi-screen: shows multiple cameras on the monitor simultaneously.

- Start Auto-switch: automatically switches between cameras.

- Start Recording: starts normal or motion-detection recording.

- Output Mode: select the output mode to Standard, Bright, Gentle or Vivid.

- Playback: plays back recorded videos for the current day.

# Accessing Menus and Functions from Live View

Right-click the mouse to access the menu that appears here.

| | | |
|---|---|---|
| Common Menu | Common Menu | A shortcut to the most common menu functions. |
| Menu | Menu | Accesses the main menu of the system. |
| Single Screen | Single Screen | Switches to a single full-screen view of the selected camera. |
| Multi-screen | Multi-Screen | Switches to a multi-screen view you select. |
| Previous Screen | Previous Screen | Switches to the previous screen. |
| Next Screen | Next Screen | Switches to the next screen. |
| Start Auto-switch | Start/Stop Auto-Switch | Enables/disables the camera auto-switch (scan). Note: The delay time of the live view configuration must be set before using Start Auto-Switch. |
| Start Recording | Start Recording | Starts recording of all channels. Continuous Record and Motion Detection Record are selectable from the drop-down list. |
| Add IP Camera | Add IP Camera | A shortcut to enter the IP camera management interface. (For HDVR series only) |
| Playback | Playback | Enters the playback interface and start playing back the video of the selected channel immediately. |
| PTZ Control | PTZ Control | A shortcut to enter the PTZ control interface of the selected camera. Note: The cameras that come with HSKIT482 and HSKIT483 do not support PTZ. |
| Output Mode | Output Mode | Output Mode is configurable with Standard, Bright, Gentle and Vivid options. |

## Using the Quick-Set Toolbar

On the screen of each channel, there is a quick set toolbar that appears when you left-click the mouse.



enables/disables Manual Recording.

accesses Instant Playback, which shows any recordings from the last five minutes. If no recording is found, it means the DVR has not recorded anything in the last five minutes.

mutes and unmutes audio. Note: The cameras with the HSKIT482 and HSKIT483 do not record audio.

accesses pan/tilt/zoom control. Note: The cameras with the HSKIT482 and HSKIT483 do not support these functions.

accesses Digital Zoom for zooming the live image. You can zoom in the image to different proportions (1 to16X) by moving the slider that appears. You can also scroll the mouse wheel to control the zoom in/out.

accesses the Image Settings menu. You can drag the mouse or click ▣ to adjust the image parameters, including brightness, contrast, and saturation. Refer to the Configuring Video Parameters for details.

exits the toolbar.

are for functions that are not available with this system.

# Recording Settings

This RCA Security System offers multiple recording options, including Instant Recording, All-Day Recording, and Motion Detection.

1. Click Start Recording from the right-click menu.

| | |
|---|---|
| ← Previous Screen | |
| → Next Screen | |
| ↺ Start Auto-switch | |
| 📷 Start Recording ▶ | 📹 Continuous Record |
| 📹 Add IP Camera | 📹 Motion Detection Record |
| ↺ Playback | |
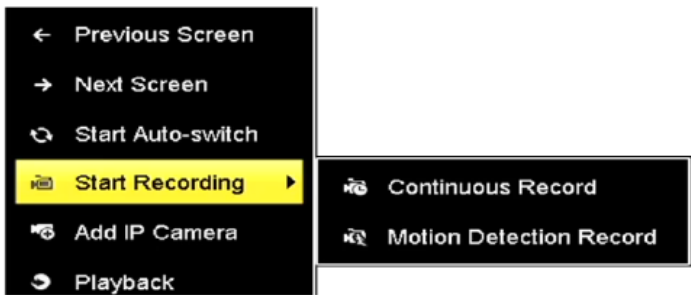
2. Select Continuous Record or Motion Detection Record on your demand.

3. Click Yes in the pop-up box to confirm the settings.

Note: Rebooting the system stops all manual recordings that are running.

# Playback

This RCA Security System offers several ways to play back recorded videos or pictures: instant playback, all-day playback for a specified channel, and playback by normal/event/smart/tag/system logs/sub-periods/ external file search/picture.
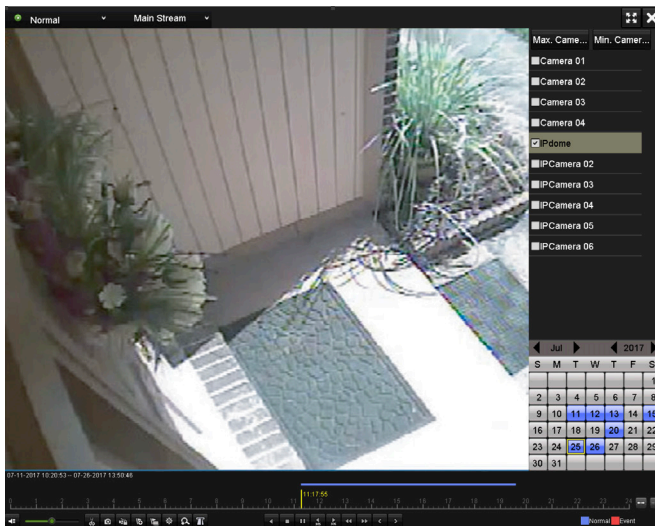
1. Go to Menu > Playback.

2. Check the channel(s) in the channel list for playback.

3. Double click a date on the calendar.

4. (Optional) Use the toolbar in the bottom part of Playback interface to control the playing progress.

5. (Optional) Select the channel(s) to execute simultaneous playback of multiple channels.

# Adjusting Live View Settings

Live View settings can be customized according to different needs. You can configure the output interface, delay time between switching cameras, the order for each channel, etc.
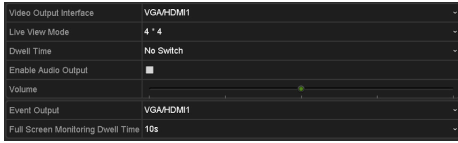


1  Go to Menu > Configuration > Live View > General.

   The settings available in this menu include:

   • Video Output Interface: Selects the output to configure the settings.

   • Live View Mode: Selects the display mode to be used for Live View.

   • Dwell Time: The delay time in seconds between switching of channels when enabling auto-switch in Live View.

   • Enable Audio Output: Enables/disables audio output for the selected camera in the live view mode.

   • Volume: Adjusts the volume of the audio output.

   • Event Output: Designates the output to show event video. If available, you can select a different video output interface from the Video Output Interface when an event occurs.

   • Full Screen Monitoring Dwell Time: Sets the delay time in seconds to show alarm event screen.
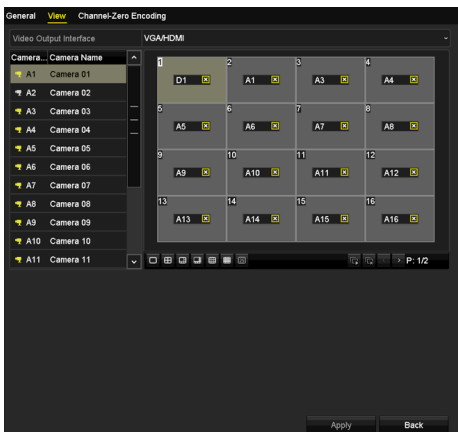
2  Set the camera order.



   1) Click View tab and select the Video Output Interface from the drop-down list.

   2) Click a window to select it, and then double-click a camera name in the camera list you would like to display. Setting an 'X' means the window will not display any camera.

   3) You can also click [icon] to start live view of all channels in order and click [icon] to stop live view of all channels. Click < or > to go to the previous or next page.

   4) Click the Apply button.

# Accessing via Web Browser

This RCA Security System offers access via Web browser as well as through the App and via connected monitor or TV.

**Minimum System Requirements:** Internet Explorer 6.0 or later or Apple Safari. Resolutions 1024x768 and above.
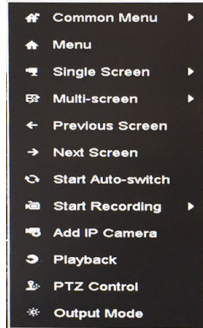
1. Right click with the mouse and highlight Common Menu. Then highlight Network and choose it.

   The Security System will prompt you to draw your unlock pattern to access this menu. Use the mouse to draw this pattern (hold to draw, release when finished).
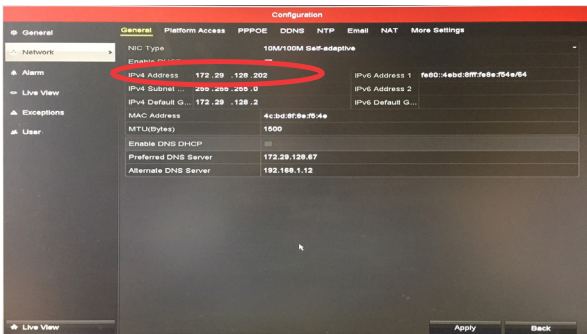
2. The Configuration screen appears. Make note of your system's IP address in the third line on the left (listed as IPV4). You'll need to use this information in the next step.
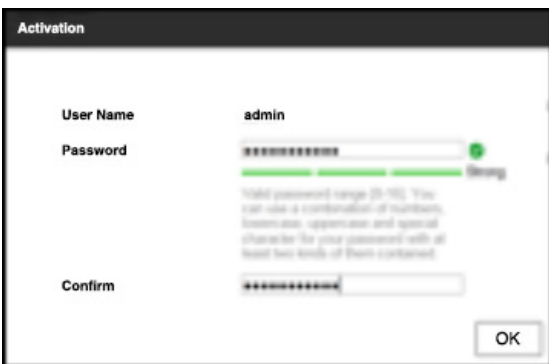
3. On your computer, open your web browser and enter the IP address of your device (from step 2) in the browser's address field. Then press Enter.

4. Log in to the device.

   If the device has not been activated, you need to activate the device first by setting the password for the admin user account.

   If the device is already activated, enter the user name and password in the login interface, and click Login.
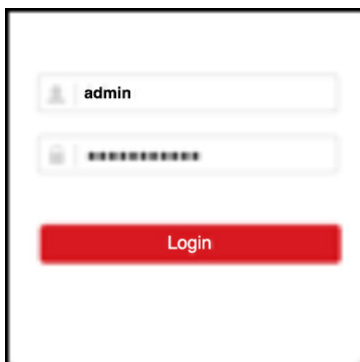
5. Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.

   You may have to close the web browser to finish the installation of the plug-in.

   After login, you can perform the operation and configuration of the device, including the live view, playback, log search, configuration, etc.

# Channel-Zero Encoding

Sometimes you need to get a remote view of many channels in real time from a web browser or CMS (Client Management System) software. Channel Zero decreases the bandwidth required for remote viewing without affecting the image quality.

1  Go to Menu > Configuration > Live View > Channel-Zero Encoding.

2  Check the checkbox after Enable Channel-Zero Encoding.

3  Configure the Frame Rate, Max. Bitrate Mode and Max. Bitrate.

4  Click the Apply button to activate the settings.

5  After you set the Channel-Zero encoding, you can get a view in the remote client or web browser of 16 channels in one screen.

# Manual Video Quality Diagnostics

The video quality of the analog channels can be diagnosed manually. You can view the diagnostic results from a list.

1  Go to Menu> Manual >Manual Video Quality Diagnostics.

2  Check the checkboxes to select the channels for diagnostics.

3  Click the button Diagnose, and the results will be displayed on a list. You can view the video status and diagnostics time of the selected channels.

NOTES:

•  Connect the camera to the device for the video quality diagnostics.

•  Three exception types can be diagnosed: Blurred Image, Abnormal Brightness and Color Cast.

# BACKING UP / EXPORTING

## Backing Up Recorded Video/Pictures

**Before you start:** Please insert the backup device(s) into the DVR!

### Backing Up Via Normal Video/Picture Search

Record files and pictures can be backed up to various devices, such as USB devices (USB flash drives, USB HDDs, USB writer), a SATA writer or e-SATA HDD.
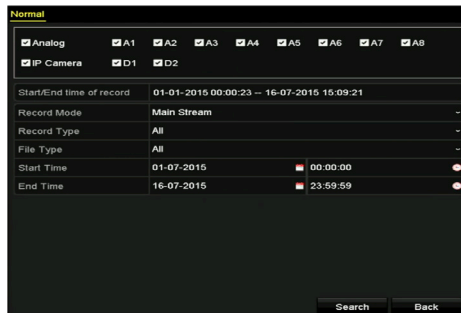
1. Go to Menu > Export > Normal.

2. Select the cameras to search.

3. Set the search condition and click the Search button to enter the search result interface.
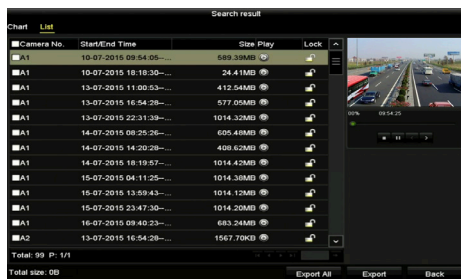
4. The matched video files are displayed in Chart or List display mode.

   Click ⊙ to play the record file if you want to see it first.

   Check the checkbox next to the video files you want to back up.

**Note:** The size of the currently selected files is displayed in the lower-left corner of the window.

5. Once you've selected the video files you want to export, click the Export button to go to the Export screen.

   You can also click Export All to select all the video files for backup and enter the Export interface.

6. Select your backup device from the drop-down list.

   Note: You can select the file format to filter the files already on the backup device.

7. Select the format of your exported file.

8. Click the Export button to start the backup process.
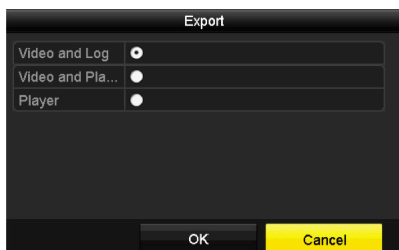
9. In the Export dialog box that appears, click the radio button next to what you want to export: video and log, video and player, or player. Then click OK to confirm.

10. A prompt will appear after the backup process is complete. Click OK to confirm.

## Backing Up Via Event Search

Back up event-related record files using USB devices (USB flash drives, USB HDDs, USB writer), SATA writer or eSATA HDD. Quick Backup and Normal Backup are supported.
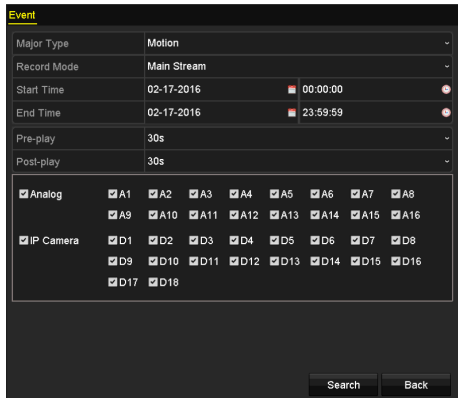
1. Go to Menu > Export > Event.

2. Select the cameras to search.

3. Select the event type to alarm input, motion, or VCA.
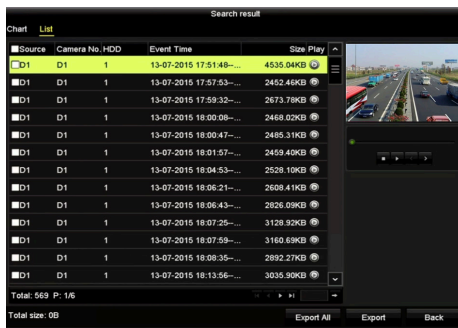
4. Set search condition and click Search button to enter the search result interface. The matched video files are displayed in Chart or List display mode.

5. Select video files from the Chart or List interface to export.

6. Export the video files. Please refer to step 5 of the previous section for more details.

## Backing up Video Clips

You may also select video clips in playback mode to export directly during Playback, using USB devices (USB flash drives, USB HDDs, USB writer), or SATA writer.
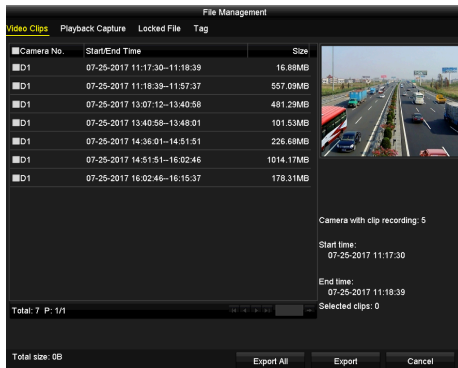
1. Go to Menu > Playback.

2. During playback, use buttons ✂ or ✂✓ in the playback toolbar to start or stop clipping record file(s).

3. Click ⚙ to enter the file management interface.

4. Export the video clips in playback. Please refer to step 5 of Backing Up Via Normal Video/Picture Search for details.

# VCA SEARCH

When VCA detection is configured, this security system supports VCA search by behavior, face, plate, people counting, and heat map results.

## Face Search

When faces are detected as captured and saved on the DVR, you can enter the Face Search interface to search and play related video files according to the specified conditions.

### Before you start

Please refer to the section on Face Detection for configuring the face detection.
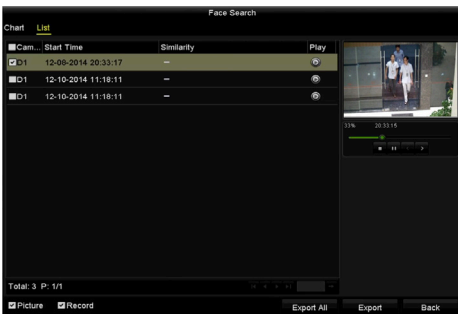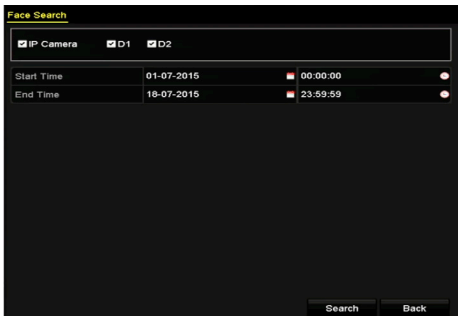




1  Go to Menu > VCA Search > Face Search.

2  Select the camera (s) for the face search.

3  Specify the start time and end time for searching the captured face pictures or video files.

4  Upload the pictures from your local storage device for matching the detected face pictures.

5  Set the similarity level for the source pictures and the captured pictures.

6  Click Search to start searching. The search results of face detection pictures are displayed in list or in chart.

7  Play the face picture related video file.

   You can double click on a face picture to play its related video file in the view window on the top right, or select a picture item and click ⊚ to play it.

   You can also click ▪ to stop playing, or click < / > to play the previous/next file.

8  If you want to export the captured face pictures to local storage device, connect the storage device to the device and click Export All to enter the Export interface.

   Click Export to export all face pictures to the storage device.

   Please refer to the chapter on Backups for the operation of exporting files.

# Behavior Search

The behavior analysis detects suspicious behavior based on VCA detection, and certain linkage methods will be enabled if the alarm is triggered.
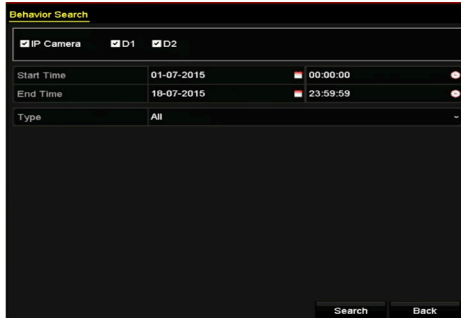


1. Go to Menu > VCA Search > Behavior Search.

2. Select the camera (s) for the behavior search.

3. Specify the start time and end time for searching the matched pictures.

4. Select the VCA detection type from the drop-down list, including the line crossing detection, intrusion detection, unattended baggage detection, object removal detection, region entrance detection, region exiting detection, parking detection, loitering detection, people gathering detection and fast moving detection.

5. Click Search to start searching. The search results of pictures are displayed in list or in chart.

6. Play the behavior analysis picture related video file.

   You can double click on a picture from the list to play its related video file in the view window on the top right, or select a picture item and click ⊙ to play it.

   You can also click ■ to stop playing, or click < / > to play the previous/next file.

7. If you want to export the captured pictures to local storage device, connect the storage device to the device and click Export All to enter the Export interface.

   Click Export to export all pictures to the storage device.

# Plate Search

You can search and view the matched captured vehicle plate picture and related information according to the plate searching conditions including the start time/end time, country and plate number.
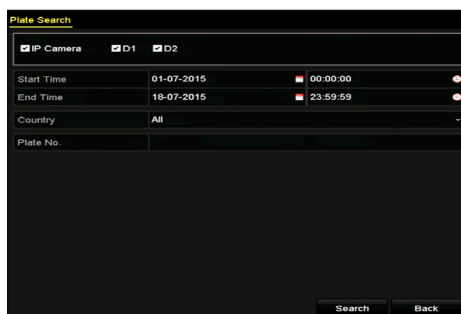


1. Go to Menu > VCA Search > Plate Search.

2. Select the camera (s) for the plate search.

3. Specify the start time and end time for searching the matched plate pictures.

4. Select the country from the drop-down list for searching the location of the vehicle plate.

5. Input the plate No. in the field for search.

6. Click Search to start searching. The search results of detected vehicle plate pictures are displayed in list or in chart.

   Please refer to the section on Face Search for the operation of the search results.

# People Counting

People Counting is used to calculate the number of people who have entered or left a certain configured area in daily/weekly/monthly/annual reports for analysis.



1  Go to Menu > VCA Search > People Counting.

2  Select the camera for the people counting.

3  Select the report type to Daily Report, Weekly Report, Monthly Report or Annual Report.

4  Set the statistics time.

5  Click the Counting button to start people counting statistics.

6  You can click the Export button to export the statistics report in excel format.

# Heat Map

Heat map is a graphical representation of data represented by colors. The heat map function is usually used to analyze the visit times and dwell time of customers in a configured area.
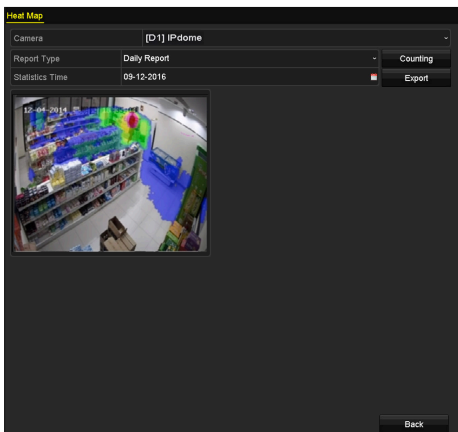


1  Go to Menu > VCA Search > Heat Map.

2  Select the camera for the heat map processing.

3  Select the report type to Daily Report, Weekly Report, Monthly Report or Annual Report.

4  Set the statistics time.

5  Click the Counting button to export the report data and start heat map statistics, and the results are displayed in graphics marked in different colors.

   As shown in the figure here, red color block (255, 0, 0) indicates the most frequented area, and blue color block (0, 0, 255) indicates the less-popular area.

   You can click the Export button to export the statistics report in excel format.

# MANUAL RECORDING/ALARMS

## Configuring Manual Recording and Continous Capture

Follow these steps to set parameters for manual recording and continuous capture. Using manual recording and continuous capture, you need to manually cancel the record and capture. The manual recording and manual continuous capture is prior to the scheduled recording and capture.
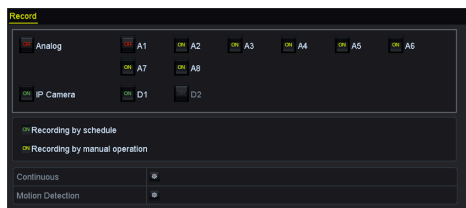


1  Go to Menu > Manual > Record.

2  Enable manual recording.

   Click the status icon OFF before camera number to change it to ON.

   Or click the status icon OFF of Analog to enable manual record of all channels.

3  Disable manual recording.

   Click the status icon ON to change it to OFF.
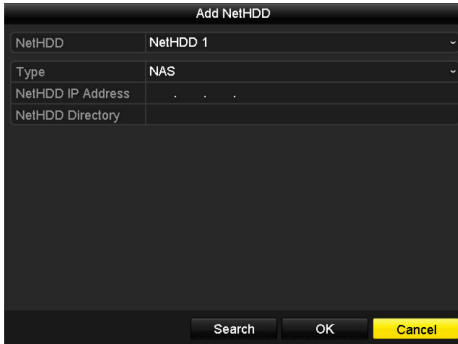
   Or click the status icon ON of Analog to disable manual record of all channels.

   After rebooting all the manual records enabled are canceled.

# HARD DRIVE MANAGEMENT
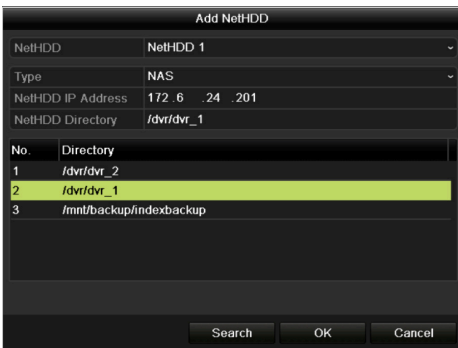
## Managing a Network Hard Drive

You can add an allocated NAS or IP SAN drive to the DVR, and use it as a network HDD.



1  Go to Menu > HDD > General.

2  Click the Add button to enter the Add NetHDD interface, as shown here.

3  Add the allocated NetHDD.

4  Select the type as NAS or IP SAN.

5  Configure the NAS or IP SAN settings.
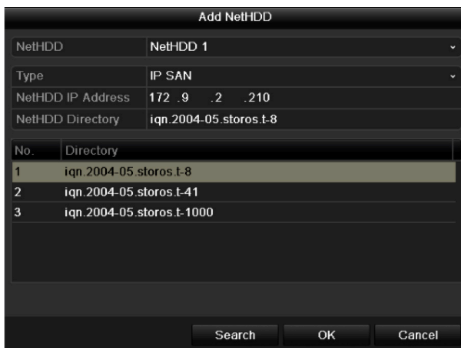


**To add a NAS disk:**

1)  Enter the NetHDD IP address in the text field.

2)  Click Search to search the available NAS disks.

3)  Select the NAS disk from the list shown below. Or you can just manually enter the directory in the text field of NetHDD Directory.

4)  Click OK to add the configured NAS disk.

   NOTE: Up to 8 NAS disks can be added.

**To add an IP SAN:**

1)  Enter the NetHDD IP address in the text field.

2)  Click the Search button to the available IP SAN disks.

3)  Select the IP SAN disk from the list shown below.

4)  Click the OK button to add the selected IP SAN disk.

   NOTE: Up to 8 IP SAN disks can be added.



6  After having successfully added the NAS or IP SAN disk, return to the HDD Information menu. The added NetHDD will be displayed in the list.

If the added NetHDD is uninitialized, please select it and click the Init button for initialization.

# Managing HDD Groups

## Setting Up HDD Groups

Multiple HDDs can be managed in groups. Video from specified channels can be recorded onto a particular HDD group through HDD settings.



1  Go to Menu > HDD > Advanced.

2  Set the Mode to Group, as shown here.

3  Click the Apply button and a dialog box will pop up. Click the Yes button to reboot the device to activate the changes.

4  After reboot of device, go to Menu > HDD > General.

5  Select HDD from the list and click the ⬚ icon to enter the Local HDD Settings interface, as shown below.

6  Select the Group number for the current HDD.

   Note: The default group No. for each HDD is 1.

7  Click the OK button to confirm the settings.

8  In the pop-up dialog box, click the Yes button to finish the settings.
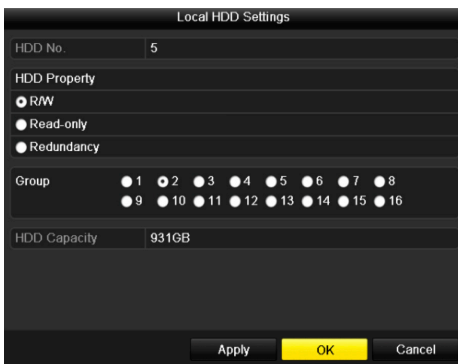
## Setting HDD Properties

HDD properties can be set to redundancy, read-only or read/write (R/W). Before setting the HDD property, please set the storage mode to Group (refer to step 4 of Setting Up HDD Groups). An HDD can be set to read-only to prevent important recorded files from being overwritten when the HDD becomes full in overwrite recording mode. When the HDD property is set to redundancy, the video can be recorded both onto the redundancy HDD and the R/W HDD simultaneously so as to ensure high security and reliability of video data.
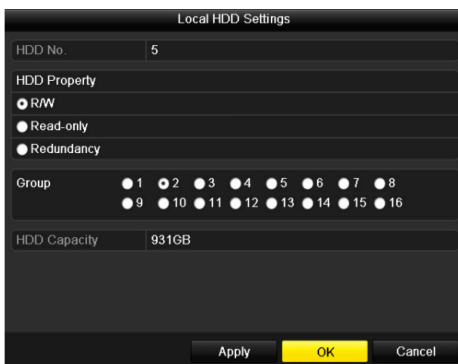


1  Go to Menu > HDD > General.

2  Select HDD from the list and click the ⬚ icon to enter the Local HDD Settings interface, as shown below.

3  Set the HDD property to R/W, Read-only or Redundancy.

4  Click the OK button to save the settings and exit the interface.

5  In the HDD Information menu, the HDD property will be displayed in the list.

   At least 2 hard disks must be added on your DVR when you want to set a HDD to Redundancy, and there is one HDD with R/W property.

# Configuring Quota Mode

Each camera can be configured with allocated quota for the storage of recorded files.



1  Go to Menu > HDD > Advanced > Storage Mode.

2  Set the Mode to Quota, as shown here.

   Note: The DVR must be rebooted to enable the changes to take effect.

3  Select a camera for which you want to configure quota.

4  Enter the storage capacity in the text field of Max. Record Capacity (GB).

   You can copy the quota settings of the current camera to other cameras if required. Click the Copy button to enter the Copy Camera interface, as shown below.

5  Select the camera (s) to be configured with the same quota settings. You can also click the checkbox of Analog to select all cameras.

6  Click the OK button to finish the Copy settings and back to the Storage Mode interface.

7  Click the Apply button to apply the settings.

   Note: If the quota capacity is set to 0, then all cameras will use the total capacity of HDD for record.

# Configuring Cloud Storage

The cloud storage facilitates you to upload and download the recorded files at any time and any place, which can highly enhance the efficiency.
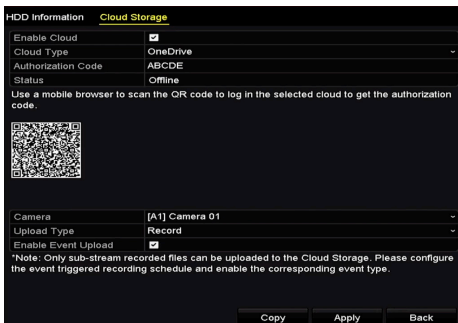


1  Go to Menu > HDD > General > Cloud Storage.

2  Check the Enable Cloud checkbox to enable the feature.

3  Select the Cloud Type from the drop-down list to One Drive, Google Drive or Drop Box.

4  According to the prompts, you are required to use a mobile browser to scan the QR code to log in the selected cloud to get the authentication code. And then copy the authentication code to the Authentication Code text filed.

5  Click Apply and then back to the main menu.

6  Enter the cloud storage interface again about 20s later. When the Status shows online, it indicates the successful registration.

7  Configure the recording schedule.

   Back to enter the record interface, choose a certain camera from the Camera drop-down list and check the Enable Schedule checkbox to enable the schedule recording. For detailed recording schedule, refer to Configuring Recording and Capture Schedule.

8 Upload the event triggered recording files to the cloud storage.

   1) Back to enter the cloud storage interface, and select the camera you have set in the recording schedule interface.

   2) Select the upload type in the Upload Type text filed.

   3) Check the Enable Event Upload checkbox.

   4) Click Apply to finish the settings.

   **Notes:**

   • Only the sub-stream recorded files can be uploaded to the Cloud Storage.

   • Please configure the event triggered recording schedule and enable the corresponding event type.

9 (Optional) You can click the Copy button to copy the cloud storage settings to other cameras. You can also click the checkbox of Analog/IP Camera to select all cameras.

   Click OK button to back to the cloud storage interface and click Apply to finish the settings.

# Configuring Disk Clone

IMPORTANT: This chapter is only applicable to DVRs with eSATA.

If the S.M.A.R.T. detection result declares the HDD is abnormal, you can choose to clone all the data on the HDD to an inserted eSATA disk manually. Refer to Checking S.M.A.R.T. Information for details of S.M.A.R.T detection.

**Before you start:** An eSATA disk should be connected to the device.
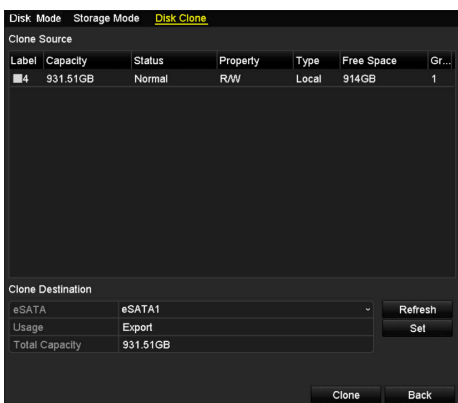


1 Enter the HDD Advanced Setting interface: Menu > HDD > Advanced

2 Click the Disk Clone tab to enter the disk clone configuring interface.

3 Make sure the usage of the eSATA disk is set as Export.

   If not, click the Set button to set it. Choose Export and click the OK button.

   NOTE: The capacity of destination disk must be the same as that of the clone source disk.

4 Check the checkbox of the HDD to be cloned in the Clone Source list.

5 Click the Clone button and a message box pops up.

6 Click the Yes button to continue.

You can check the clone progress in the HDD status.

# Checking HDD Status

You may check the status of the installed HDDs on DVR so as to take immediate check and maintenance in case of HDD failure.

### Checking HDD Status in the HDD Information Interface

1 Go to Menu > HDD > General.

2 Check the status of each HDD which is displayed on the list, as shown here.

If the status of HDD is Normal or Sleeping, it works normally. If the status is Uninitialized or Abnormal, please initialize the HDD before use. And if the HDD initialization is failed, please replace it with a new one.

### Checking HDD Status in the System Information Interface

1 Go to Menu > Maintenance > System Info > HDD.

2 View the status of each HDD displayed on the list, as shown here.

# Checking S.M.A.R.T Information

The S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) is a monitoring system for HDD to detect and report on various indicators of reliability in the hopes of anticipating failures.

1 Go to Menu > Maintenance > HDD Detect > S.M.A.R.T. Settings.

2 Select the HDD to view its S.M.A.R.T. information list, as shown here.

NOTE: If you want to use the HDD even when the S.M.A.R.T. checking is failed, you can check the checkbox before the Continue to use this disk when self-evaluation is failed item.

# Detecting Bad Sectors

You can detect bad sectors of an HDD to check the status of the HDD.

1 Go to Menu > Maintenance > HDD Detect > Bad Sector Detection.

2 Select a HDD and click the Detect button to start detecting.

3 You can click the Pause button to pause the detection and click the Resume button to resume the detection.

4 If there is error information about the HDD, you can click the Error Info button to view the information.

# Configuring HDD Error Alarms

You can configure HDD error alarms when the HDD status is Uninitialized or Abnormal.
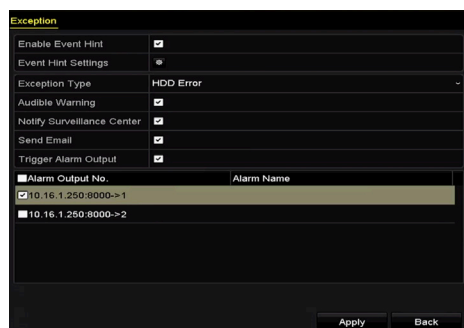


1 Go to Menu > Configuration > Exceptions.

2 Select the Exception Type to HDD Error from the drop-down list.

3 Check the checkbox(s) below to select the linkage action(s) for HDD error. The linkage actions can be selected to: Audible Warning, Notify Surveillance Center, Send Email and Trigger Alarm Output.

4 When the Trigger Alarm Output is selected, you can also select the alarm output to be triggered from the list below.

5 Click the Apply button to save the settings.

# RECORDING

## Configuring Encoding Parameters

**Before you start**

1  Make sure that the HDD has already been installed. If not, please install a HDD and initialize it. (Menu>HDD>General)

2  Click Advanced tab to check the storage mode of the HDD. (Menu>HDD>Advanced>Storage Mode)

   1) If the HDD mode is Quota, please set the maximum record capacity. For detailed information, see Configuring Quota Mode.

   2) If the HDD mode is Group, you should set the HDD group. For detailed information, see Configuring HDD Group.

1  Go to Menu>Record>Parameters.

2  Set the parameters for recording.

   1) Select the Record tab to configure.

   2) Select a camera from the camera drop-down list.

   3) View the Camera Resolution.

      Note: When Turbo HD, AHD, or HDCVI input is connected, you can view the information including the input signal type, resolution and frame rate (e.g., 5 MP 20 Hz). When CVBS input is connected, you can view the information such as NTSC or PAL.

| Camera | [A1] Camera 01 | |
|---|---|---|
| Camera Resolution | NO VIDEO | |
| Encoding Parameters | Main Stream(Continuous) | Main Stream(Event) |
| Stream Type | Video & Audio | Video & Audio |
| Resolution | 1920*1080(1080P) | 1920*1080(1080P) |
| Bitrate Type | Constant | Constant |
| Video Quality | Medium | Medium |
| Frame Rate | 15fps | 15fps |
| Max. Bitrate Mode | General | General |
| Max. Bitrate(Kbps) | 1536 | 1536 |
| Max. Bitrate Range Recommend... | 2304~3840(Kbps) | 2304~3840(Kbps) |
| Max. Average Bitrate(Kbps) | 1142 | 1142 |
| Video Encoding | H.265 | H.265 |

Enable H.265+    ☐

**More Settings...**

   4) Configure the following parameters for the Main Stream (Continuous) and the Main Stream (Event).

      **Stream Type:** Set the stream type to be Video or Video & Audio.

      **Resolution:** Set recording resolution.

      • HUHI series DVR support 5 MP and 4 MP resolution of all the channels.

      • The 3 MP signal input is available for channel 1 of DS-7204/7304HQHI, for channel 1/2 of DS-7208/7308HQHI, and for channel 1/2/3/4 of DS-7216/7316HQHI.

      • The analog signal inputs (Turbo HD, AHD, HDCVI, CVBS) and IP signal input can be recognized and connected automatically.

      • If the configured encoding resolution conflicts with the resolution of the front-end camera, the encoding parameters will adjust automatically to meet the front-end camera. E.g., if the resolution of the front-end camera is 720p, then the encoding resolution of the main stream will adjust to 720p automatically.

      • The resolution of 960 × 1080 (1080P Lite) is available when the 1080P Lite is enabled in the Record>Advanced Settings interface (refer to Chapter 5.12 Configuring 1080P Lite).

      • Please refer to the Appendix-Specifications for the supported resolutions of different models.

      **Bitrate Type:** Set the bitrate type to be Variable or Constant.

      **Video Quality:** Set the video quality of recording, with 6 levels configurable.

Note: The Stream Type, Resolution, Bitrate Type and Video Quality are not configurable for the Main Stream (Event) of the IP Camera.

**Frame Rate:** Set the frame rate of recording.

- For HQHI series DVR, when 3 MP signal input is connected, the frame rate of the main stream cannot exceed 15 fps.

- For HUHI series DVR, when 5 MP signal input is connected, the frame rate of the main stream cannot exceed 12 fps. When 4 MP signal input is connected, the frame rate of the main stream cannot exceed 15 fps.

- The minimum frame rate for main stream is 1 fps.

**Max. Bitrate Mode:** Set the mode to General or Custom.

**Max Bitrate (Kbps):** Select or customize the maximum bit rate for recording.

**Max. Bitrate Range Recommended:** A recommended max. bit rate range is provided for reference.

**Max. Average Bitrate (Kbps):** Set the max. average bit rate which refers to the average amount of data transferred per unit of time.

**Video Encoding:**

You can configure H.264 or H.265 for the main stream (continuous) of IP and analog cameras.

Note: When the connected IP camera does not support H.265, only H.264 can be seleted for the main stream (continuous).

3 Check the checkbox of Enable H.264+ or Enable H.265+ to enable this function. Enabling it helps to ensure the high video quality with a lowered bitrate.

Notes:

- The analog and IP cameras support enabling H.264+/H.265+ if the video encoding is H.264/H.265 for the main stream.

- After enabling H.264+ or H.265+, the Bitrate Type, Video Quality, Max. Bitrate Mode, Max. Bitrate(Kbps) and Max. Bitrate Range Recommend are not configurable.

- If H.265+ is enabled, line crossing detection and region entrance detection are not supported.

- For the connnected IP camera, the H.264+ or H.265+ should be supported by the camera and added to the DVR with the HIKVISION protocol.

- You should reboot the device to activate the new settings after enabling the H.264+ or H.265+.

4  Click More Settings to configure more parameters.

**Pre-record:** The time you set to record before the scheduled time or event. For example, when an alarm triggered the recording at 10:00, if you set the pre-record time as 5 seconds, the camera records it at 9:59:55.

**Post-record:** The time you set to record after the event or the scheduled time. For example, when an alarm triggered the recording ends at 11:00, if you set the post-record time as 5 seconds, it records till 11:00:05.

**Expired Time:** The time for keeping the record files in the HDDs, once exceeded, the files will be deleted. The files will be saved permanently if the value is set as 0. The actual keeping time for the files should be determined by the capacity of the HDDs.

**Redundant Record:** Enabling redundant record means you save the record in the redundant HDD. See Chapter 5.8 Configuring Redundant Recording.

**Record Audio:** Enable this feature to record the sound and disable it to record the video without sound.

**Video Stream:** Main stream, Sub-stream and Dual-stream are selectable for recording. When you select sub-stream, you can record for a longer time with the same storage space.

Notes:

- The Redundant Record option is only available when the HDD mode is Group.

- Redundant HDD is required for the redundant record function. For detailed information, see Chapter 14.3.2 Setting HDD Property.

- For network cameras, the parameters of Main Stream (Event) are not editable.

5  Click Apply to save the settings.

6  Optionally, you can click Copy to copy the settings to other analog channels if needed.

7  Set encoding parameters for sub-stream.

1) Select the Sub-Stream tab.

2) Select a camera in the camera drop-down list.

3) Configure the parameters.

4) Click Apply to save the settings.

5) (Optional) If the parameters can also be used to other cameras, click Copy to copy the settings to other channels.
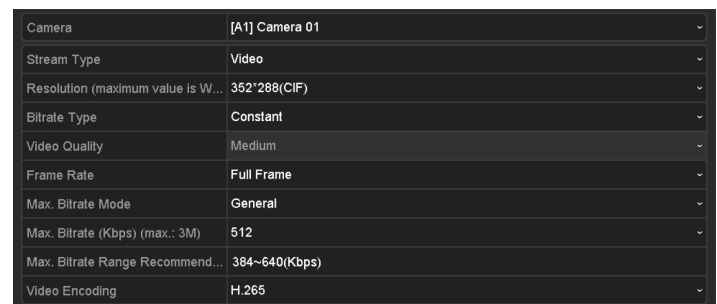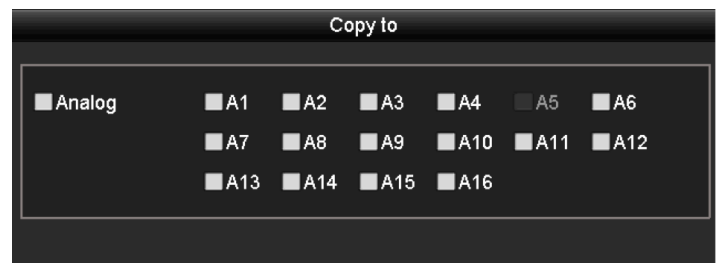
Notes:

- The resolution of sub-stream can be selected among WD1, 4CIF, and CIF.

- The minimum frame rate for the sub-stream is 1 fps.

- You can select the Video Encoding for the sub-stream of IP and analog cameras. For the analog cameras, H.264 and H.265 are selectable. For the IP cameras supporting H.265, you can select H.265 encoding mode.

8 Set parameters for capture.

1) Select the Capture tab.

2) Select a camera from the drop-down list.

3) Configure the parameters.

4) Click Apply to save the settings.

5) (Optional) If the parameters can also be used to other cameras, click Copy to copy the settings to other channels.

   Note: The interval is the time period between two capturing actions. You can configure all the parameters on this menu on your demand.



# Configuring Recording and Capture Schedule

Set the record schedule, and then the camera will automatically start/stop recording according to the configured schedule.

Notes:

- The DVR supports continuous, alarm, motion, motion | alarm, motion & alarm, event, and POS (for DS-7300HQHI and DS-7300/9000HUHI-K) triggered recording types.

- In this chapter, we take the record schedule procedure as an example, and the same procedure can be applied to configure schedule for recording.



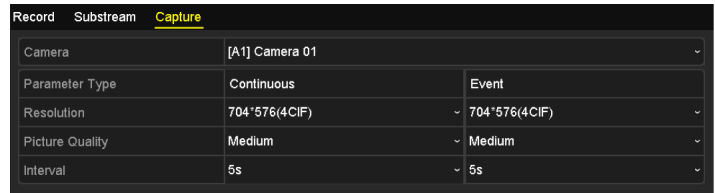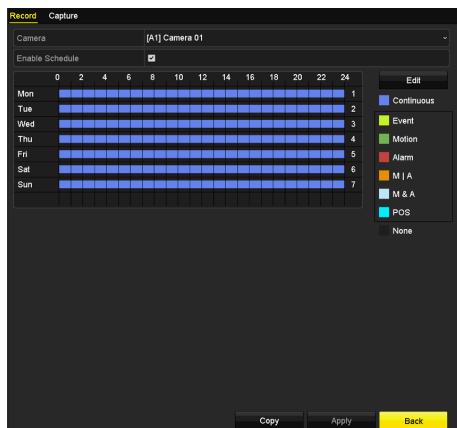1 Go to Menu > Record/Capture > Schedule.

Different recording types are marked in different color icons.

**Continuous:** scheduled recording.

**Event:** recording triggered by all event triggered alarm.

**Motion:** recording triggered by motion detection.

**Alarm:** recording triggered by alarm.

**M/A:** recording triggered by either motion detection or alarm.

**M&A:** recording triggered by motion detection and alarm.

**POS:** recording triggered by POS and alarm.

Note: The POS recording is supported by DS-7300HQHI and DS-7300/9000HUHI-K series DVR only.

2 Choose the camera you want to configure in the Camera drop-down list.

3 Check the checkbox of Enable Schedule.

4   Configure the record schedule.

**To edit the schedule:**

1) Click Edit.

2) In the message box, you can choose the day to which you want to set schedule.

3) To schedule an all-day recording, check the checkbox after the All Day item.

4) To arrange other schedule, leave the All Day checkbox blank and set the Start/End time.

Notes:

• Up to 8 periods can be configured for each day. And the time periods cannot be overlapped with each other.
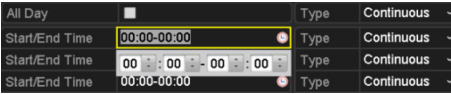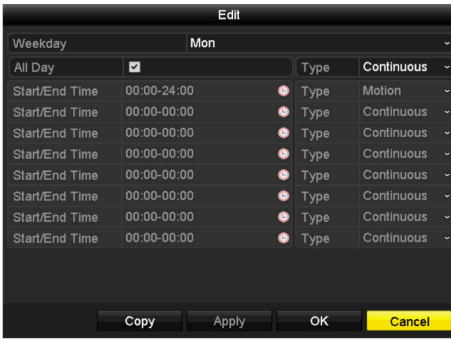
• To enable Event, Motion, Alarm, M | A (motion or alarm), M & A (motion and alarm), and POS triggered recording, you must configure the motion detection settings, alarm input settings or VCA settings as well. For detailed information, refer to Chapter 8.1, Chapter 8.7 and Chapter 9.

5) Repeat the above steps 1)-4) to schedule recording for other days in the week. If the schedule can also be set to other days, click Copy.

Note: The Holiday option is available when you enable holiday schedule in Holiday settings. See Chapter 5.7  Configuring Holiday Record.

6) Click OK to save the settings and return to upper level menu.

**To draw the schedule:**

1) Click the color icon to select a record type in the event list on the right-side of the interface.

2) Drag the mouse on the schedule.

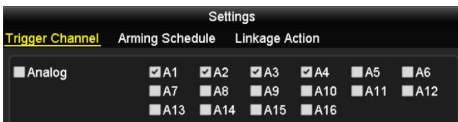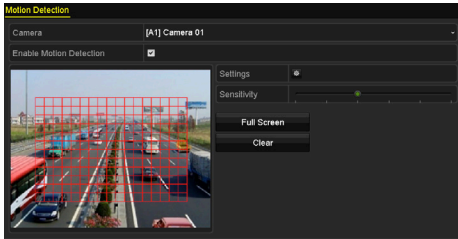3) Click the other area except for the schedule table to finish and exit from the drawing.

You can repeat step 4 to set schedule for other channels. If the settings can also be used to other channels, click Copy, and then choose the channel to which you want to copy to.

5   Click Apply in the Record Schedule interface to save the settings.

# Configuring Motion Detection Recording and Capture

Follow the steps to set the motion detection parameters. In the live view mode, once a motion detection event takes place, the DVR can analyze it and do many actions to handle it. Enabling motion detection function can trigger certain channels to start recording, or trigger full screen monitoring, audio warning, notifying the surveillance center, sending email and so on.





1  Go to Menu>Camera>Motion.

2  Configure Motion Detection:

1) Choose camera you want to configure.

2) Check the checkbox after Enable Motion Detection.

3) Drag and draw the area for motion detection by mouse. If you want to set the motion detection for all the area shot by the camera, click Full Screen. To clear the motion detection area, click Clear.

4) Click 🔧, and the message box for channel information pops up.

5) Select the channels which you want the motion detection event to trigger recording.

6) Click Apply to save the settings.

7) Click OK to back to the upper level menu.

8) Exit the Motion Detection menu.

3  Configure the schedule.

Please refer to the step 4 of Configuring Recording and Capture Schedule, while you may choose Motion as the record type.

# Configuring Alarm Triggered Recording and Capture

Follow the procedure to configure alarm triggered recording or capture.
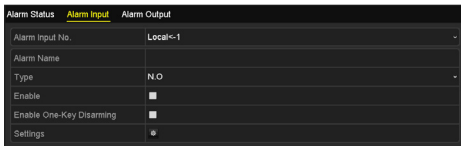


1. Go to Menu > Configuration > Alarm > Alarm Input.

2. Select Alarm Input No.

3. Input Alarm Name.

4. Select N.O (normally open) or N.C (normally closed) for alarm type.

5. Check the checkbox of Enable to enable alarm.

6. Click the ⚙ button after Settings to set the triggered channels, arming schedule, linkage actions and PTZ linking. Refer to step 4 of Configuring Recording and Capture Schedule for detailed operations.

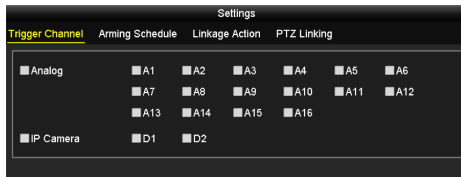7. Click Apply to save the settings.

Repeat the steps from 1 to 8 to configure other alarm input parameters. If the settings can also be applied to other alarm inputs, click Copy and choose the alarm input number.

# Configuring Event Recording and Capture

The event triggered recording can be configured through the menu. Then events include the motion detection, alarm and VCA events (face detection/face capture, line crossing detection, intrusion detection, region entrance detection, region exiting detection, loitering detection, people gathering detection, fast moving detection, parking detection, unattended baggage detection, object removal detection, audio loss exception detection, sudden change of sound intensity detection, and defocus detection).

**Notes:**

- HUHI series support line crossing detection and intrusion detection of all channels, and 2-ch sudden scene change detection. Channels with audio support audio exception detection.

- DS-7200HQHI series support 4-ch line crossing detection and intrusion detection. DS-7216HQHI series also support 1-ch sudden scene change detection. Channels with audio support audio exception detection.

- DS-7300HQHI-K series support 4-ch line crossing detection and intrusion detection, and 1-ch sudden scene change detection. Channels with audio support audio exception detection.

- For the analog channels, the line crossing detection and intrusion detection conflict with other VCA detection such as sudden scene change detection, face detection and vehicle detection. You can only enable one function.
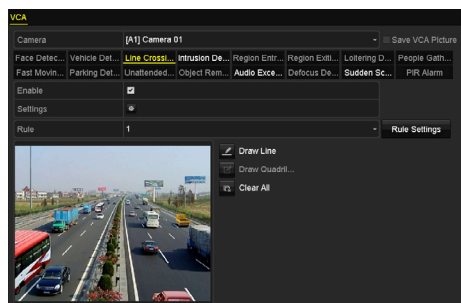


1. Go to Menu > Camera > VCA.

2. Select a Camera.

3. Configure the detection rules for VCA events. For details, see the step 6 in Line Crossing Detection.

4. Click the icon ⚙ to configure the alarm linkage actions for the VCA events. Trigger Channel tab and select one or more channels which will start to record when VCA alarm is triggered.

5. Click Apply to save the settings.

6. Enter Record Schedule Settings interface (Menu> Record> Schedule>Record Schedule), and then set Event as the record type. For details, see step 2 in Configuring Recording and Capture Schedule.

# Configuring Manual Recording and Continous Capture

Follow the steps to set parameters for the manual recording and continuous capture. Using manual recording and continuous capture, you need to manually cancel the record and capture. The manual recording and manual continuous capture is prior to the scheduled recording and capture.
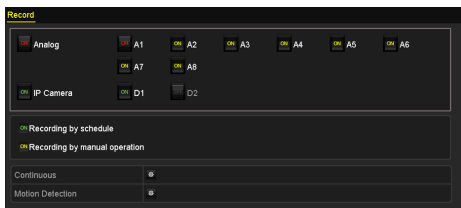


1 Go to Menu > Manual > Record.

2 To enable manual recording: Click the status icon **OFF** before camera number to change it to **ON**. Or click the status icon **OFF** next to Analog to enable manual record on all channels.

To disable manual recording: Click the status icon **ON** to change it to **OFF**. Or click the status icon **ON** next to Analog to disable manual recording on all channels.

Note: After rebooting all the manual records enabled are canceled.

# Configuring Holiday Recording and Capture

Follow these steps to configure a recording or capture schedule for a holiday.
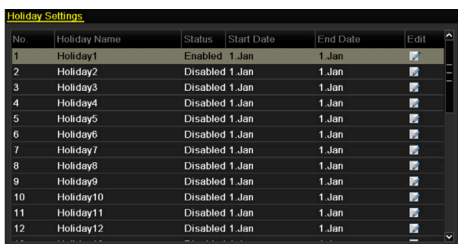


1 Go to Menu > Record > Holiday.

2 Enable Edit Holiday schedule.

   1) Click 🖉 to enter the Edit interface.
   2) Check the checkbox next to Enable.
   3) Select Mode from the drop-down list.

      There are three different modes for the date format to configure holiday schedule. By Month, By Week, and By Date are selectable.

   4) Set the start and end date.
   5) Click Apply to save settings.
   6) Click OK to exit the Edit interface.

3 Configure the record schedule.

   Please refer to Configuring Recording and Capture Schedule, while you may choose Holiday in the Schedule drop-down list, or you can draw the schedule on the timeline of Holiday.
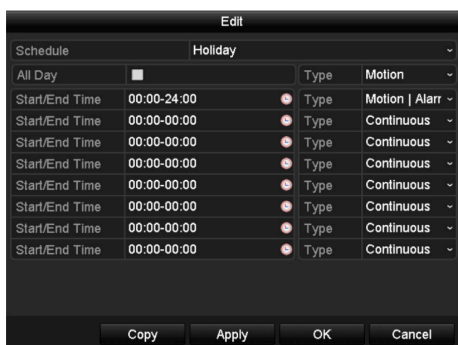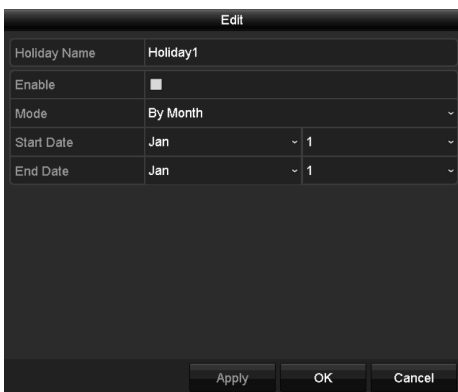
Notes:

• Up to 8 periods can be configured for each day. And the time periods cannot be overlapped each other.

• In the time table of the channel, both holiday schedule and normal day schedule are displayed.

• Repeat the above step 4 to set Holiday schedule for other channels. If the holiday schedule can also be used to other channels, click Copy and choose the channel you want to apply the settings.

# Configuring Redundant Recording and Capture

Enabling redundant recording and capture, which means saving the record files and captured pictures not only in the R/W HDD but also in the redundant HDD, will effectively enhance the data safety and reliability.

### Before you start

You must set the Storage mode in the HDD advanced settings to Group before you set the HDD property to Redundant. For detailed information, please refer to Managing HDD Group. There should be at least another HDD which is in Read/Write status.



1  Go to Menu > HDD.

2  Select the HDD and click 📝 to enter the Local HDD Settings interface.

   1)  Set the HDD property to Redundant.

   2)  Click Apply to save the settings.

   3)  Click OK to back to the upper level menu.

3  Go to Menu > Record > Parameters > Record.

   1)  Select Camera you want to configure.

   2)  Click More Settings button.

   3)  Check the checkbox of Redundant Record.

   4)  Click OK to save the settings.

   5)  If the encoding parameters can also be used to other channels, click Copy and choose the channel you want to apply the settings.

# Configuring HDD Group

You can group the HDDs and save the record files in certain HDD group.

1  Go to Menu > HDD > Advanced > Storage Mode. Check whether the storage mode of the HDD is Group. If not, set it to Group. For detailed information, please refer to Managing HDD Group.

2  Select General in the left bar. Click 📝 to enter editing interface.
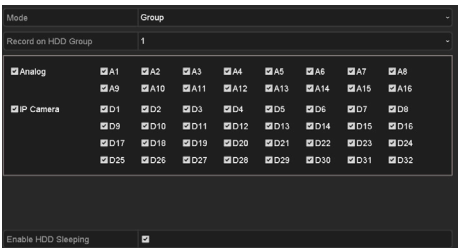


3  Configuring HDD group.

   1)  Choose a group number for the HDD group.

   2)  Click Apply to save your settings.

   3)  Click OK to back to the upper level menu.

4  Repeat the above steps to configure more HDD groups.

5  Choose the Channels which you want to save the record files in the HDD group.

   1)  Go to Menu > HDD > Advanced > Storage Mode.

   2)  Choose Group number in the drop-down list of Record on HDD Group

   3)  Check the channels you want to save in this group.

   4)  Click Apply to save settings.

     NOTE: After you have configured the HDD groups, you can configure the recording settings following the procedure provided in earlier sections.

# File Protection

You can lock the recorded files or set the HDD property to Read-only to protect the record files from being overwritten.
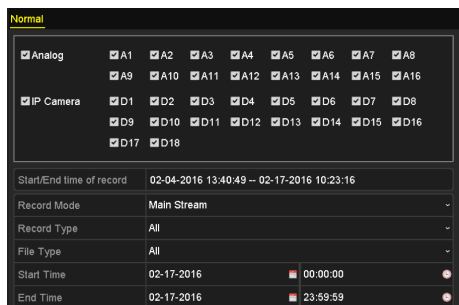
## To protect files by locking them:

1 Go to Menu > Export > Normal.

2 Select the channels you want to investigate by checking the checkbox to ✔.

3 Configure the record mode, record type, file type, start time and end time.

4 Click Search to show the results.

5 Protect the record files.

1) Find the record files you want to protect, and then click the 🔓 icon which will turn to 🔒, indicating that the file is locked.

NOTE: The record files of which the recording is still not completed cannot be locked.

2) Click 🔒 to change it to 🔓 to unlock the file and the file is not protected.

## To protect files by setting HDD property to Read-only:

### Before you start

To edit HDD property, you need to set the storage mode of the HDD to Group. See Managing HDD Group.
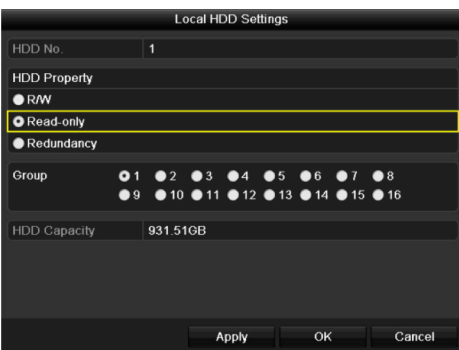
1 Go to Menu > HDD > General.

2 Click ✏️ to edit the HDD you want to protect.

3 Set the HDD to Read-only.

4 Click OK to save settings and back to the upper level menu.

NOTES:

• You cannot save any files in a Read-only HDD. If you want to save files in the HDD, change the property to R/W.

• If there is only one HDD and is set to Read-only, the DVR cannot record any files. Only live view mode is available.

• If you set the HDD to Read-only when the DVR is saving files in it, then the file will be saved in next R/W HDD. If there is only one HDD, the recording will be stopped.

# One-Key Enabling/Disabling H.264+/H.265+ for Analog Cameras

You can one-key enable or disable H.264+/H.265+ for the analog cameras.

### To Enable H.264+/H.265+ for All Analog Cameras

1   Go to Menu > Record > Advanced.

2   Click Enable to enable H.264+/H.265+ for all the analog cameras and the following attention box pops up.

3   Click Yes to enable the function and reboot the device to have new settings taken effect.

### To Disable H.264+/H.265+ for All Analog Cameras

1   Go to Menu > Record > Advanced.

2   Click Disable to disable H.264+ for all the analog cameras and the following attention box pops up.

3   Click Yes to enable the function and reboot the device to have new settings taken effect.

# Configuring 1080P Lite

When the 1080P Lite Mode is enabled, the encoding resolution at 1080P Lite (real-time) is supported. If not, up to 1080P (non-real-time) is supported.

NOTE: This chapter is appplicable to HQHI series DVR.

### To enable 1080P Lite Mode:

1   Go to Menu > Record > Advanced.

2   Check the checkbox of 1080P Lite Mode and click Apply to pop up the attention box. After enabling 1080p lite mode, the 3 MP signal is not accessible to analog channel.

3   Click Yes to reboot the device to have new settings taken effect.

### To disable 1080P Lite Mode:

1   Go to Menu > Record > Advanced.

2   Uncheck the checkbox of 1080P Lite Mode and click Apply. The following attention box pops up.

3   Click Yes to reboot the device to activate the new settings or No to restore the old settings.