# HIKVISION

# Quick Start Guide

**Turbo HD series DVR**
DS-72xxHGHI-SH
DS-73xxHQHI-SH

**Note: For more information refer to the complete User Manual located on the CD-ROM**

# OVERVIEW

**Please connect a monitor and a USB mouse (supplied) to the DVR for configuration purposes**

# 1. OVERVIEW

## THE BOX CONTAINS:

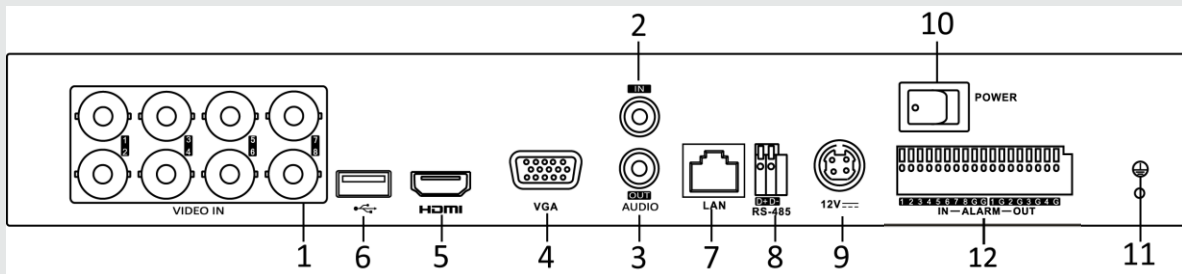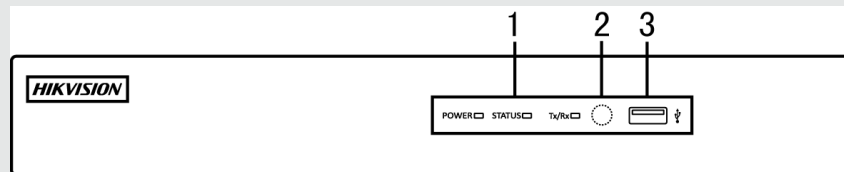| | | | | |
|---|---|---|---|---|
| DVR | USB Mouse | IR Remote (Batteries not included) | Power Cord | Hard Drive Mounting screws and brackets |
| Hard Drive (Preinstalled) | Hard Drive Cables | Rack Mount Ears (not included in 4-ch model box) | Quick Start Guide | Manual/Software CD |

Please note, that the Quick Start Guide is compiled for the latest firmware versions. Please upgrade the firmware of the DVR to the latest version before proceeding. Also note, that the CD may contain outdated manuals and software.

For latest firmware, manual and software downloads please visit:
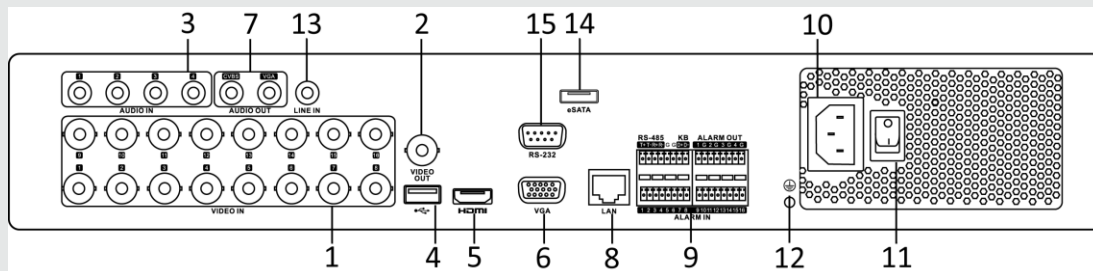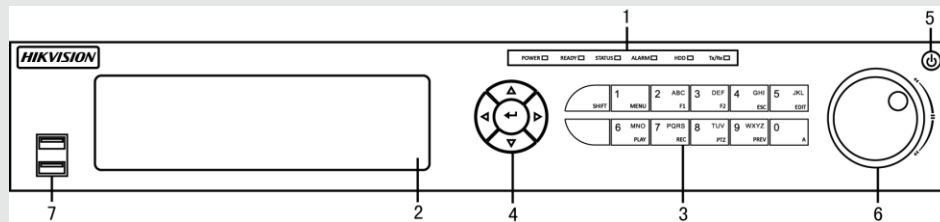
www.hikvision.com/en/us/download.asp

**DS-72xxHGHI-SH**

REAR VIEW

1. Video In
2. Audio In
3. Audio Out
4. VGA output
5. HDMI output
6. USB Interface
7. Network Interface (RJ45)
8. Rs-485 Interface
9. Power Supply Port
10. Power Switch
11. Grounding Screw
12. Alarm In/Out

FRONT VIEW

1. Power, Status and Tx/Rx indicators
2. IR Receiver
3. USB Interface

## DS-73xxHQHI-SH



| REAR VIEW | FRONT VIEW |
|---|---|
| 1. Video In | 1. Power, Ready, Status, Alarm, HDD And Tx/Rx Indicators |
| 2. Video Out | 2. DVD-R/W |
| 3. Audio In | 3. Composite Keys |
| 4. USB Interface | 4. Direction/Enter Keys |
| 5. HDMI output | 5. Power |
| 6. VGA output | 6. Jog Shuttle Control |
| 7. Audio Out | 7. USB Interface |
| 8. Network Interface | 8. IR Receiver |
| 9. RS-485 Interface | |
| 10. Power Supply | |
| 11. Power Switch | |
| 12. GND | |
| 13. Line In | |
| 14. eSATA | |
| 15. RS-232 Interface | |

# 2. MAIN MENU LAYOUT

DEFAULT USERNAME: admin    DEFAULT PASSWORD: 12345

(Please note, that the username and password are case sensitive)

**Main Menu**

View recorded video and make Backup

- Playback

Search for snapshots, make large backups

- File Management

Setup recording type, motion detection, resolution and frame rate and more

- Recording Configuration

- Cameras Setup

Add cameras, Change brightness, contrast… Camera name, PTZ, Privacy

Setup Date/Time, Network, screen settings, user accounts and more

- System Configuration

- Maintenance

Upgrade firmware, factory default, system logs, import/export settings

Model number, firmware version, camera status, HDD status and more

- System Information

User: admin

Log Out and Lock the DVR

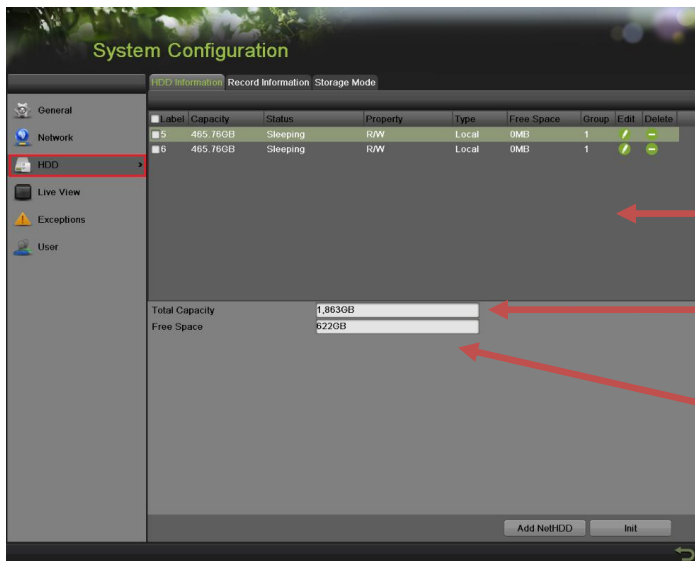Displays the current logged in user

Exit MENU to Live View

# 3. FORMATTING THE HARD DRIVE

## FORMATTING THE HARD DRIVE

If the Hard Drive (HDD) is not formatted (initialized), the DVR will begin to beep. The beeping will continue until the HDD is formatted. To format the HDD, go to:
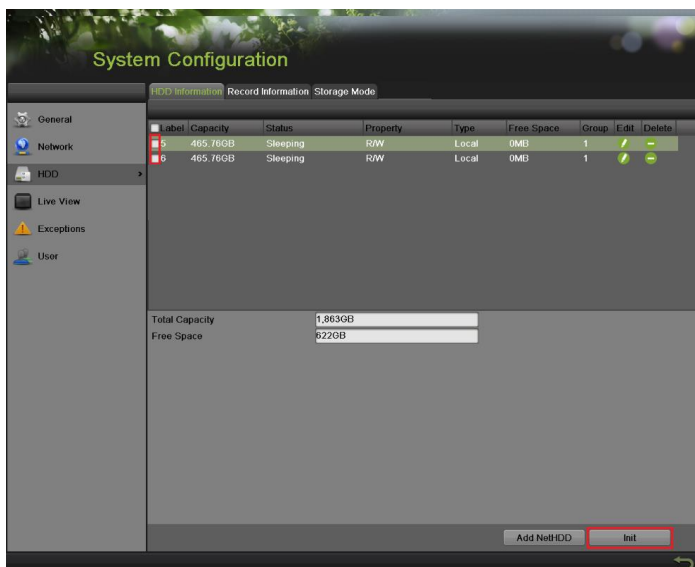
**"MENU" > "SYSTEM CONFIGURATION" > "HDD"**
  **Select the HDDs that need to be formatted, and press "INIT"**



List of HDDs

Total HDD Space

Free Space



**Please Note:**

**Units purchased with HDDs, already come with formatted HDDs**

**Formatting the HDDs also erases the recorded video from the HDDs (this does not affect the settings).**

# 4. SETING UP DATE/TIME

## DATE AND TIME SETUP

To setup the Time and Date on a DVR, please go to:

**"MENU" > "SYSTEM CONFIGURATION" > "GENERAL"**



NTP Settings

Time Zone and Daylight Savings Time settings

Date and Time settings

# 5. SETTING UP THE NETWORK

## SETTING UP NETWORK ACCESS

Networking a DVR requires 3 steps:
1. Assign an **IP address, Default Gateway, Subnet Mask, and a DNS server (Please note: DNS, not DDNS)** to the DVR
2. Forward the appropriate ports on the router **(Port Forwarding)**.
3. Register **DDNS** (DDNS registration is required only if the public IP address is Dynamic).

To assigning an **IP ADDRESS**, go to **"MENU">"SYSTEM CONFIGURATION">"NETWORK"**

**General**

**Select NIC Type**

**Enable DHCP**

With DHCP enabled, the router will assign an IP address to the DVR

### System Configuration

General DDNS Email SNMP NAT More Settings

General
Network
HDD
Live View
Exceptions
User

| | |
|---|---|
| NIC Type | 10M/100M/1000M Self-ada |
| Enable DHCP | |
| IPv4 Address | 192 .0 .0 .64 |
| IPv4 Subnet Mask | 255 .255 .255 .0 |
| IPv4 Default Gateway | . . . |
| MTU(Bytes) | 1500 |

| | |
|---|---|
| IPv6 Address 1 | |
| IPv6 Address 2 | |
| IPv6 Default Gateway | |
| MAC Address | 00:40:48:bf:e3:2d |

DNS Server
Preferred DNS Server
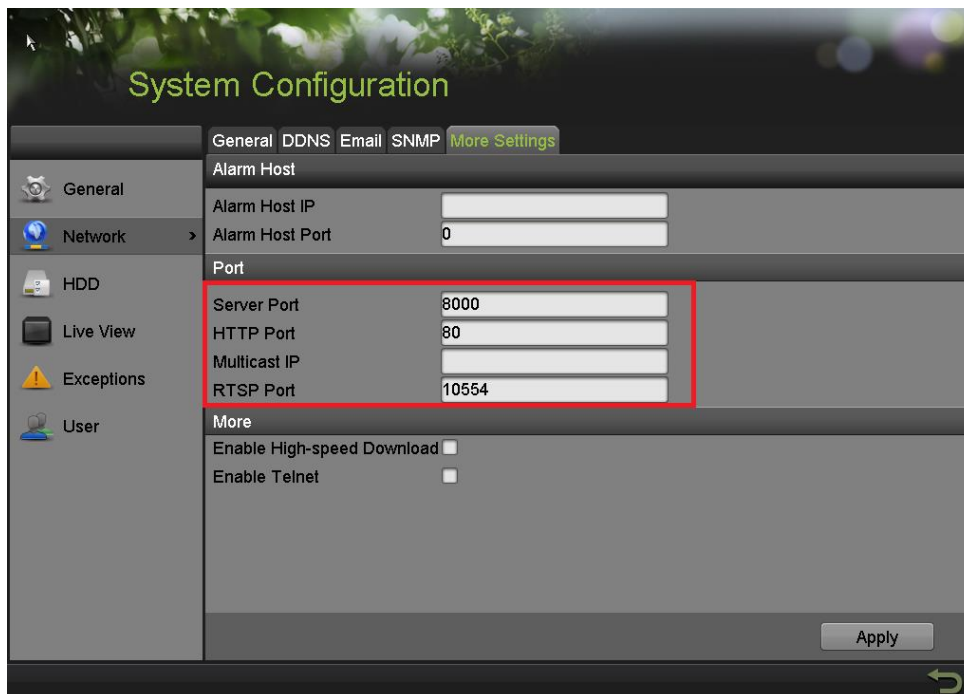Alternate DNS Server

Refresh     Apply

**IP CONFIGURATION**
- **Please note that the DVR have a default IP Address set to 192.0.0.64**

## SETTING UP NETWORK ACCESS

After assigning the IP information, click on the **"MORE SETTINGS"** tab



The **"MORE SETTINGS"** tab contains the ports that need to be forwarded for remote access



The **SERVER PORT** is responsible for the **MOBILE APP** and **CLIENT SOFTWARE** log-in.
The **HTTP PORT** is responsible for **WEB BROWSER** log-in.
The **RTSP PORT** is responsible for **VIDEO/AUDIO STREAMING**.

Units with older firmware have the **RTSP PORT** set to **554**. A lot of cell phone carriers block incoming data through port **554**, which is why Hikvision recommends changing that port to **10554**

The **HTTP PORT** and the **SERVER PORT** can be changed if desired, in order to avoid conflicts with the **ISP** or the existing network configuration.

# PORT FORWARDING

After assigning the IP information to the DVR, connect a computer to the same router that the DVR is connected to (wired connection is recommended, to avoid complications). Log into the **ROUTER**, and proceed with **PORT FORWARDING**.

For **PORT FORWARDING** assistance contact the Internet Service Provider **(ISP)**, or the router manufacturer. Also refer to www.portforward.com for port forwarding step by step instructions. Please be aware, that Hikvision USA is not associated with www.portforward.com, and not responsible for any activity between the user and www.portforward.com. Please refrain from downloading any software from the abovementioned website.

Proceed to the **"ROUTERS"** section for step by step instructions.

# DDNS SETUP

DDNS registration has been made more user friendly, and takes only a few seconds to complete. The legacy units require user registration on www.hik-online.com. This step is no longer needed.
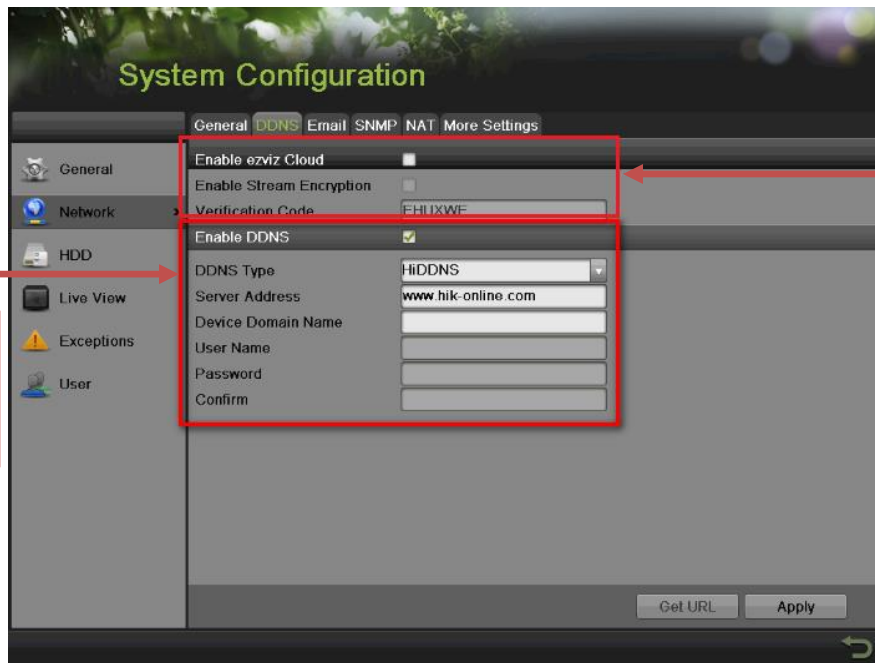
Click on the DDNS tab



In the **DDNS** tab:
   a.   Enable DDNS
   b.   Change the **DDNS TYPE** to **HiDDNS** (in some cases **HkDDNS**)
   c.   Make sure that the **SERVER ADDRESS** is set to www.hik-online.com
   d.   Create a **DEVICE DOMAIN NAME** (the domain name CANNOT contain **spaces, special characters and/or upper case letters**

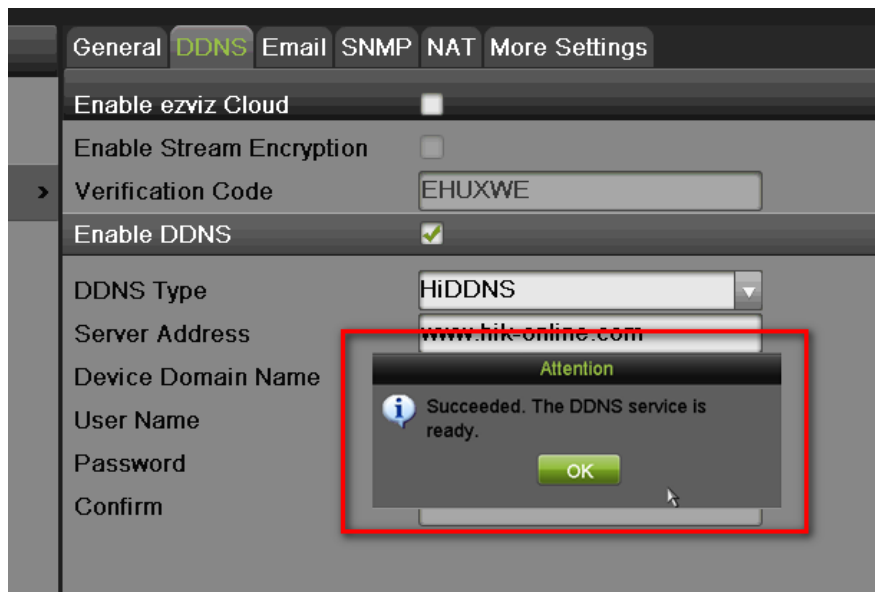## SETTING UP NETWORK ACCESS



**Enable DDNS and create a DOMAIN NAME**

EZVIZ is used for a connection through a secure server.
In this case port forwarding is not required.

**Please contact Technical Support for detailed information**

After the changes have been made, presses **"APPLY".** A **"SUCCESS"** message will pop up



If the Domain Name does not meet the acceptable criteria, and/or is already registered, an error message will appear (The domain name cannot contain upper case characters, spaces, special characters…).

# 6.  ADDING IP CAMERAS

## ADDING IP CAMERAS

Go to:

**"MENU">"CAMERAS SETUP"**



Press the **"GARBAGE CAN"** icon to delete an added camera

Press **"+"** to add the camera to the DVR

Press "**EDIT**" to change the camera's IP address.

Please refer to the manual for detailed information

**"REFRESH"** to find cameras connected to the network

List of detected cameras **(YELLOW)**
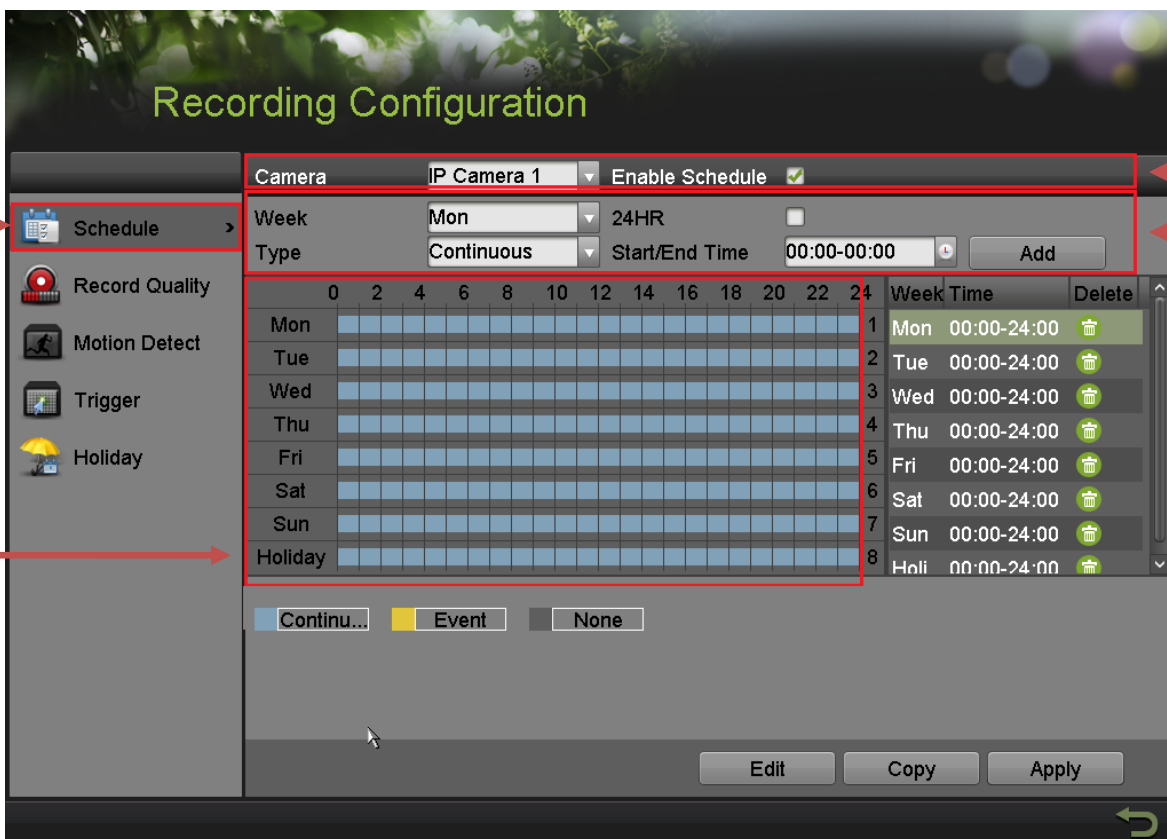
List of added cameras **(WHITE)**

- Please note: To change the CAMERA NAME go to **OSD**

# 7. SETTING UP RECORDING

## SETTING UP RECORDING

Hikvision DVRs are defaulted to **CONTINUOUS RECORDING**.

Please go to: **"MENU">"RECORDING CONFIGURATION"**



The color of the calendar is what constitutes the recording schedule:
1. **Blue=Continuous**
2. **Yellow=Event (Motion/Alarm)**
3. **Grey= No Recording**

This field is used to customize a part of the existing schedule
**This can be ignored if setting up motion only recording**

Setup Recording Schedule (Continuous/Motion)

Select the camera. Enable/Disable the schedule

- **Please note:** If **ENABLE SCHEDULE** is not checked, then that camera would not be recording

## SETTING UP RECORDING

To set the DVR to **MOTION RECORDING**, go to:

1. "MENU">"RECORDING CONFIGURATION"
2. Click on the **"EVENT"** under the calendar (yellow). After this the mouse cursor will change to a **WAND**.
3. Select the calendar, and it will turn **YELLOW** (just like on a computer, click on the top-left corner of the calendar and drag to the bottom-right corner).
4. Press **APPLY.**
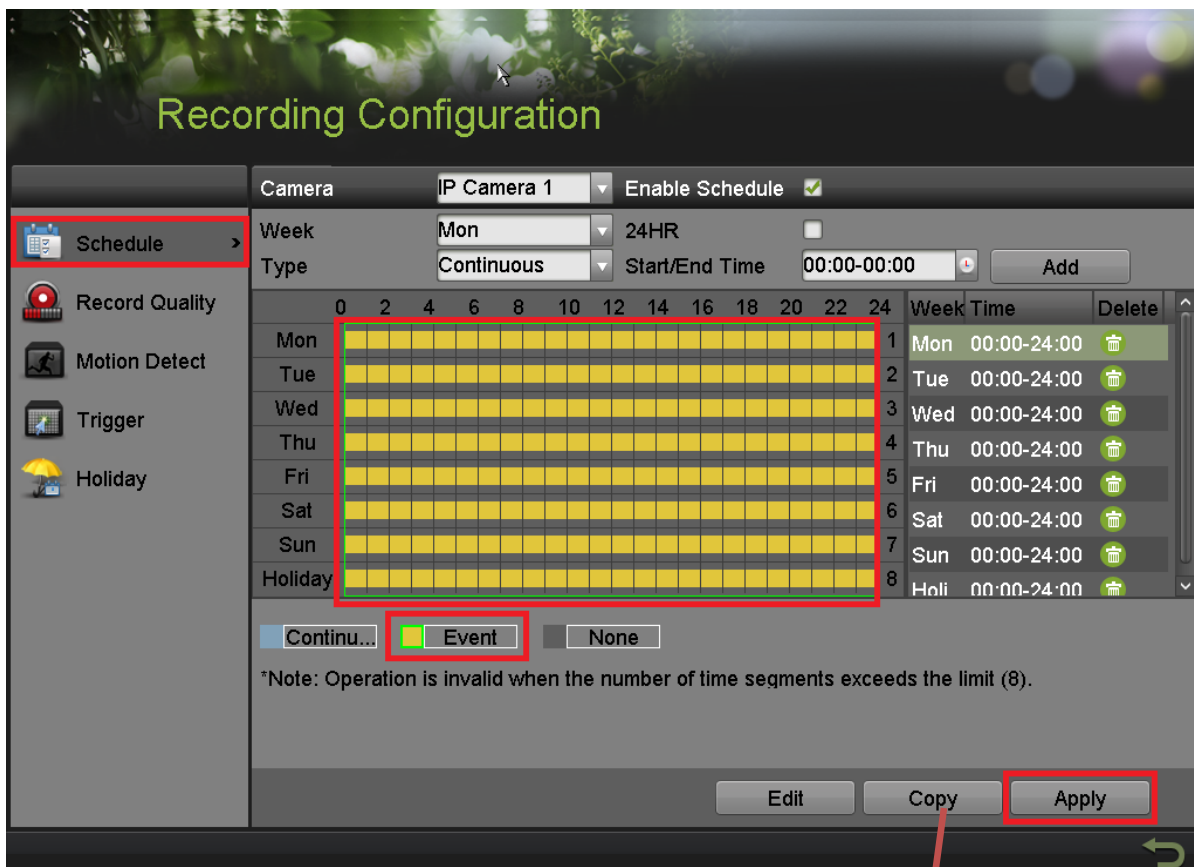


5. Press **COPY** to copy the new schedule to the remaining cameras.
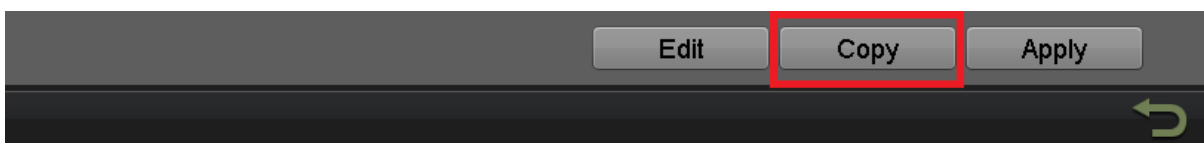
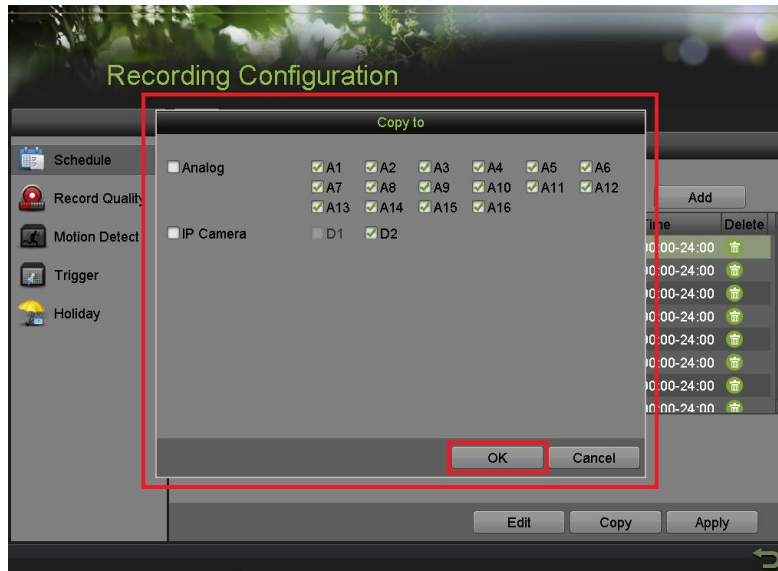## SETTING UP RECORDING



After the recording has been set to **"EVENT RECORDING"** go to **"MOTION DETECT"** to set the motion detection for every camera. In this step, the **"COPY"** option is available only for analog cameras, the IP cameras need to be configured individually.
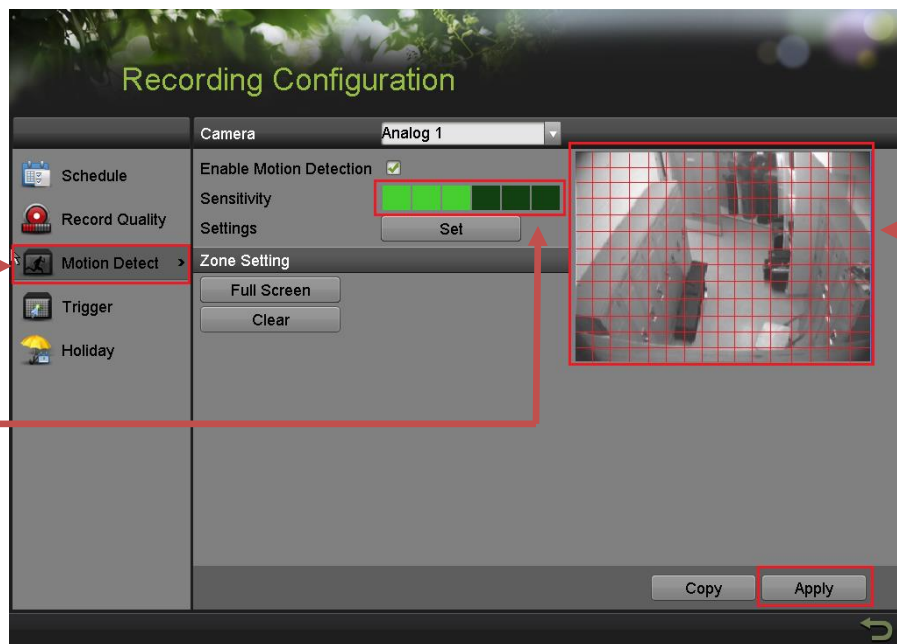


**Motion Detection Setup**

**Motion Sensitivity**
The amount of bright green squares indicates the sensitivity level. (in this picture the sensitivity is set to 3)

**Motion Area**
The grid indicates the area, where motion will be detected

## SETTING UP RECORDING

To set the recording **RESOLUTION/FRAMERATE/BITRATE** settings, please go to:

**"RECORD QUALITY"** in the **"RECORDING CONFIGURATION"** submenu

**Select Main Stream**

**Record Quality**



**Select Camera**

**Continuous**
Pertains to live view image as well as continuous recording

**Event**
Pertains to event recording only (Motion or alarm)

## SETTING UP RECORDING

**Stream Type** allows enable/disable the audio streaming from the cameras (if the camera does not have audio capabilities, then the **Stream Type** will only have **Video** option)

**Resolution** allows setting of the recording resolution

**Bitrate Type** allows the DVR to save HDD space when set to **Variable** (Available choses: **Variable** and **Constant**)

**Video Quality** adjusts picture clarity (**medium setting (3 green squares)** is recommended. Medium setting is the balance between good picture and saving HDD space).

**Frame Rate** allows setting of the recording frame rate (**12-15 fps** is recommended to save HDD space and not to have a "choppy" image)

**Max Bitrate Mode** allows choosing between preset bitrate values and customizing the values (**General** setting is recommended)

**Max Bitrate (KBPS)** is the chosen bitrate for streaming the video

**Max Bitrate Recommended** is the DVR's recommended bitrate according to the parameters set above.

**Record Audio** allows turning the audio recording on or off (for IPC, this option is only available if the camera has a microphone connected to it)

**Video Stream** allows changing the recording stream between **Main Stream** and **Sub Stream** (this step requires a restart).

**Input Resolution** shows the resolution of video stream from camera.

**Recording Time(days)** shows how much time left for recording, based on current HDD volume and recording paramters.

**Please refer to the table below for recommended recording parameters**

| Resolution | Video Quality | Frame Rate (FPS) | Bitrate (KBPS) |
|---|---|---|---|
| 320x240 (QVGA) | Medium (3 squares) | 12-15 | 207 |
| 352x240 (CIF) | Medium (3 squares) | 12-15 | 384 |
| 640x480 (VGA) | Medium (3 squares) | 12-15 | 768 |
| 704x480 (4CIF) | Medium (3 squares) | 12-15 | 1024 |
| 1280x720 (720P) | Medium (3 squares) | 12-15 | 2048 |
| 1280x960 (960P) | Medium (3 squares) | 12-15 | 2048 |
| 1600x1200 (2MP) | Medium (3 squares) | 12-15 | 2560 |
| 1920x1080 (1080P) | Medium (3 squares) | 12-15 | 3072 |

## SETTING UP RECORDING

Last step in the recording setup is setting up the **Sub Stream**.
The **Sub Stream** is used for streaming on mobile devices, as well as displaying multiple cameras on the local output

**Select Sub Stream**

**Record Quality**



Recording Configuration

Main Stream  Substream  Record  Capture

| | |
|---|---|
| Camera | IP Camera 1 |
| Stream Type | Video & Audio |
| Resolution | 352*240(CIF) |
| Bitrate Type | Variable |
| Video Quality | |
| Frame Rate | Full Frame |
| Max. Bitrate Mode | General |
| Max. Bitrate(Kbps) | 512 |
| Max. Bitrate Recommended | 512(Kbps) |

Schedule
Record Quality
Motion Detect
Trigger
Holiday

Copy    Apply

Unlike Main Stream,
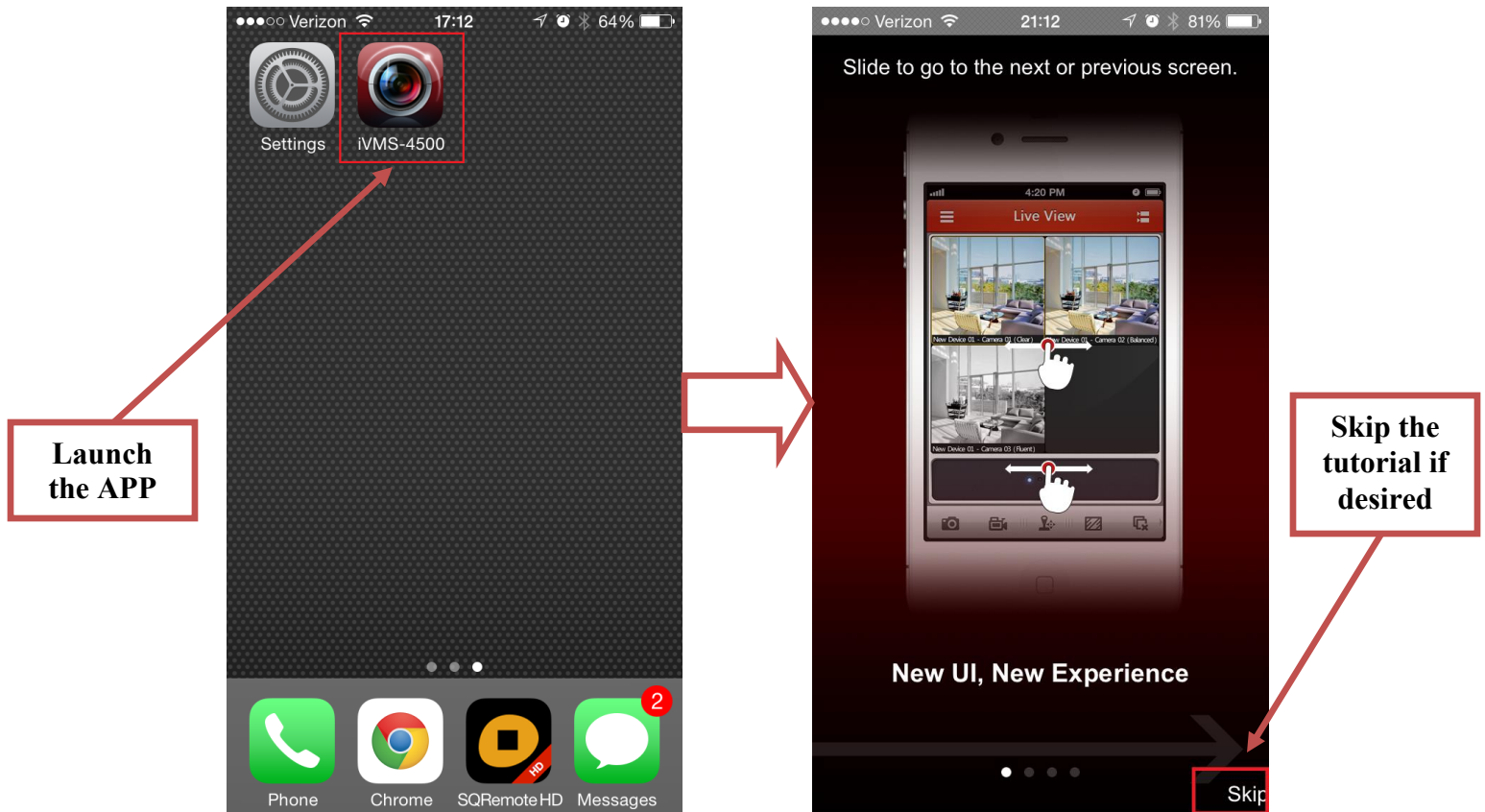**Sub Stream** can only go up to **4CIF**

**Select Camera**

- **Please note:** If the upload speed is not sufficient, consider lowering the frame rate/bitrate/resolution for more fluent mobile app viewing.

# 8. CONFIGURING THE MOBILE APP

## CONFIGURING THE MOBILE APP

All Hikvision DVRs, NVRs and IP Cameras can be accessed with **iVMS-4500 application.**
The APP can be downloaded from the **APP STORE (iPhone/iPad), PLAYSTORE (Android)**.
The app is also available for **WINDOWS MOBILE** devices (Nokia Phones and tablets).

Download the app from the appropriate place and launch it. When the APP is launched for the first time, a tutorial screen will be displayed, and it can be easily skipped.

**Launch the APP**

**Skip the tutorial if desired**

# HIKVISION

## CONFIGURING THE MOBILE APP

"MENU" BUTTON

DEVICES BUTTON

"ADD" BUTTON

ENTER THE INFO
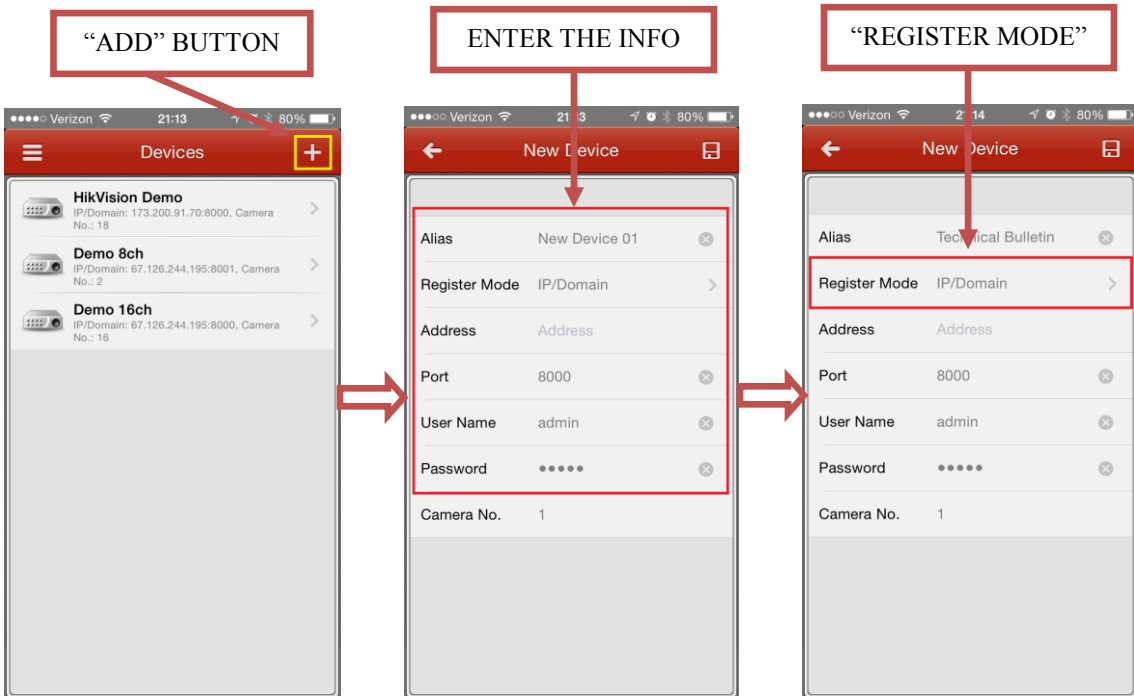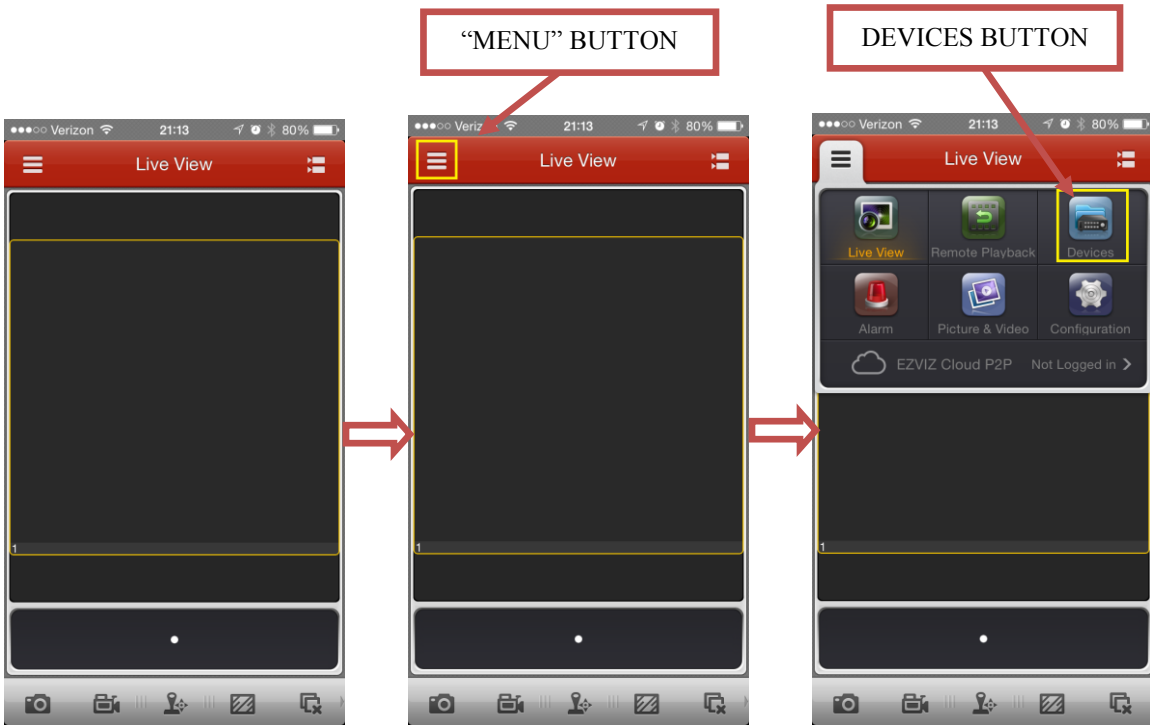
"REGISTER MODE"

**Please Note:**
If free Hikvision DDNS is configured for the device, change the **"REGISTER MODE"** to **HiDDNS**

# CONFIGURING THE MOBILE APP

**CHANGE THE MODE**

**Register Mode**

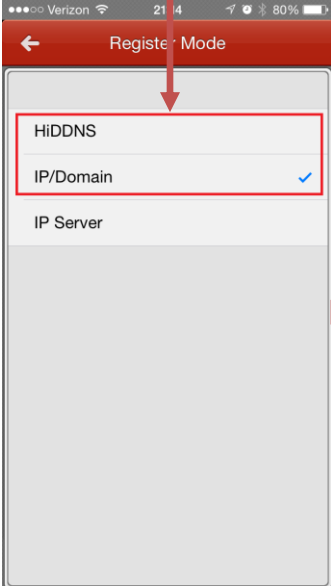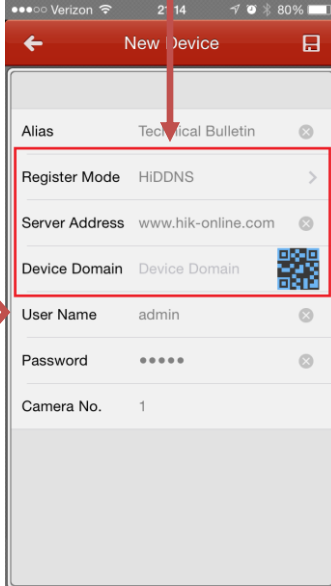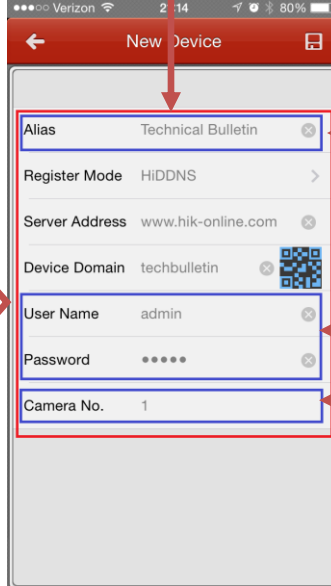| | |
|---|---|
| HiDDNS | |
| IP/Domain | ✓ |
| IP Server | |

**ENTER "DEVICE DOMAIN"**

**New Device**

| Alias | Technical Bulletin | ⊗ |
|---|---|---|
| Register Mode | HiDDNS | › |
| Server Address | www.hik-online.com | ⊗ |
| Device Domain | Device Domain | |
| User Name | admin | ⊗ |
| Password | ••••• | ⊗ |
| Camera No. | 1 | |

**COMPLETE THE PAGE**

**New Device**

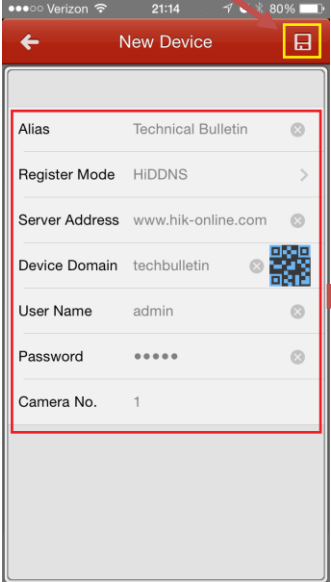| Alias | Technical Bulletin | ⊗ |
|---|---|---|
| Register Mode | HiDDNS | › |
| Server Address | www.hik-online.com | ⊗ |
| Device Domain | techbulletin | ⊗ |
| User Name | admin | ⊗ |
| Password | ••••• | ⊗ |
| Camera No. | 1 | |

**Please Note:**
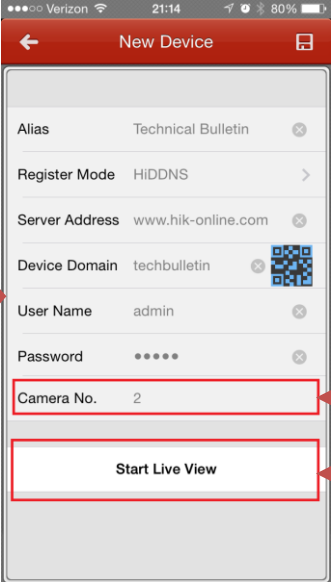Alias is just a friendly name for the address book (i.e. Home/Office)

**User Name** and **Password** are the DVR's/NVR's username and password

**Please note:**
The "CAMERA NUMBER" is set to **1**.
After saving the changes, the number will resemble the correct amount of cameras

**"SAVE" BUTTON**

**New Device**

| Alias | Technical Bulletin | ⊗ |
|---|---|---|
| Register Mode | HiDDNS | › |
| Server Address | www.hik-online.com | ⊗ |
| Device Domain | techbulletin | ⊗ |
| User Name | admin | ⊗ |
| Password | ••••• | ⊗ |
| Camera No. | 1 | |

**New Device**

| Alias | Technical Bulletin | ⊗ |
|---|---|---|
| Register Mode | HiDDNS | › |
| Server Address | www.hik-online.com | ⊗ |
| Device Domain | techbulletin | ⊗ |
| User Name | admin | ⊗ |
| Password | ••••• | ⊗ |
| Camera No. | 2 | |
| Start Live View | | |

**Please note:**
The "CAMERA NUMBER" has changed to the correct number of cameras connected to the DVR/NVR

**Please note:**
"START LIVE VIEW" button will begin live camera stream

www.hikvision.com/en/us

# 9. PLAYING BACK RECORDED VIDEO

## PLAYING BACK RECORDED VIDEO

To initiate a **PLAYBACK**, go to **"MENU">"PLAYBACK"**.
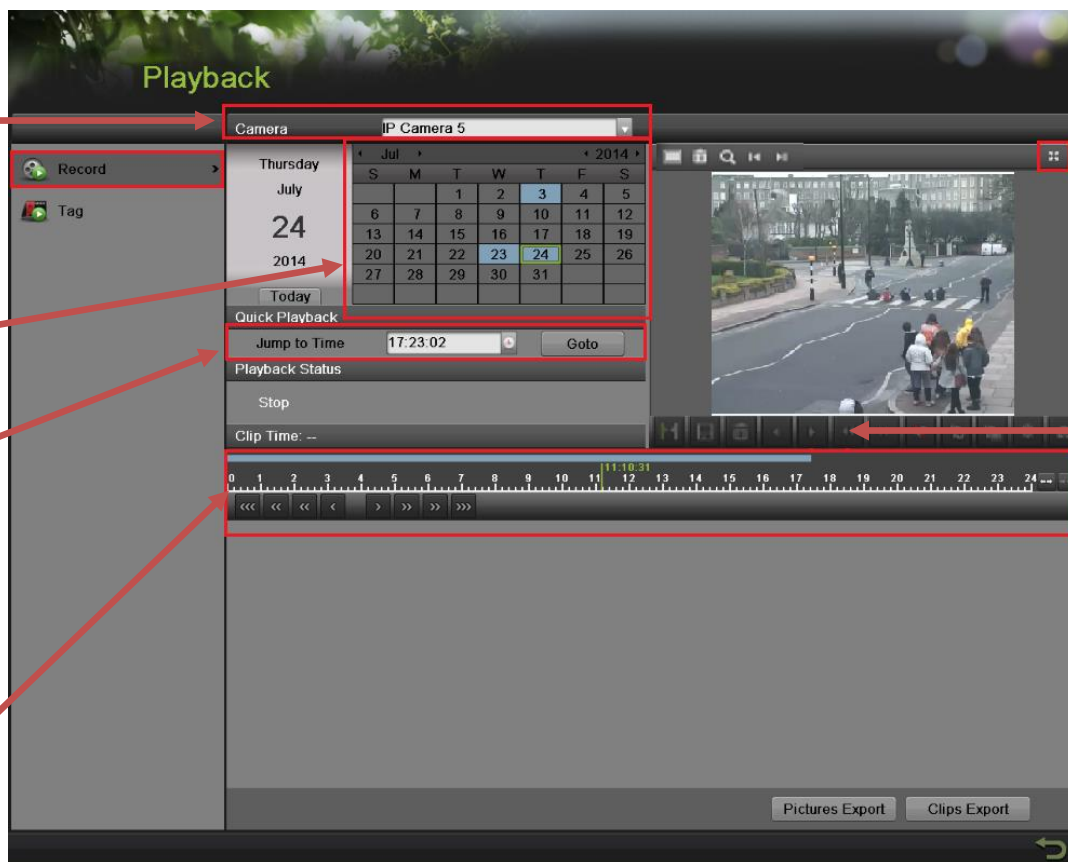


Steps to initiate **PLAYBACK**
1. Select the desired camera
2. Select the desired date. The days that contain recording will be highlighted on the calendar
3. Select the desired time using the Timeline or "Jump to Time" feature.
4. Press "PLAY"

# 10. MAKING A BACKUP

## PLAYING BACK RECORDED VIDEO



START/END Clipping

Save clip

Select the "START TIME"

Select the "END TIME"

Export Clips
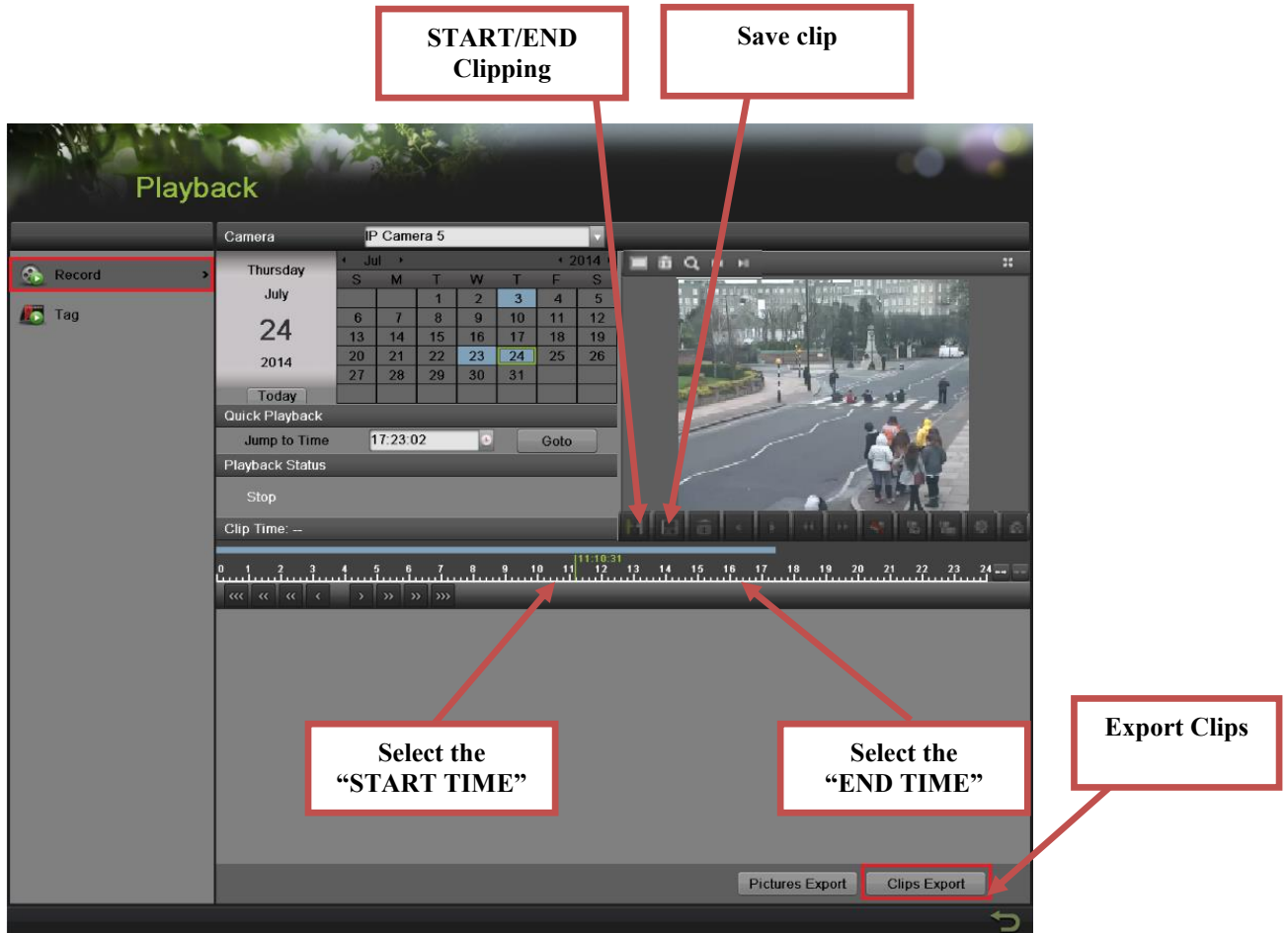
Steps to make a **BACKUP** of recorded video
1. Insert a USB FLASH Drive or a USB HDD into an available USB Port
2. Go to **"MENU">"PLAYBACK"**
3. Select the DATE and beginning time of the incident
4. Click **"START CLIPPING"**
5. Select the ending time of the incident
6. Click **"END CLIPPING"** (Same button as "Start Clipping")
7. Click **"SAVE CLIP"**
8. Repeat steps 1-7 as many times as required
9. Click **"CLIPS EXPORT"**

# PLAYING BACK RECORDED VIDEO

After pressing **"CLIPS EXPORT"** a new window opens up containing all saved clips.
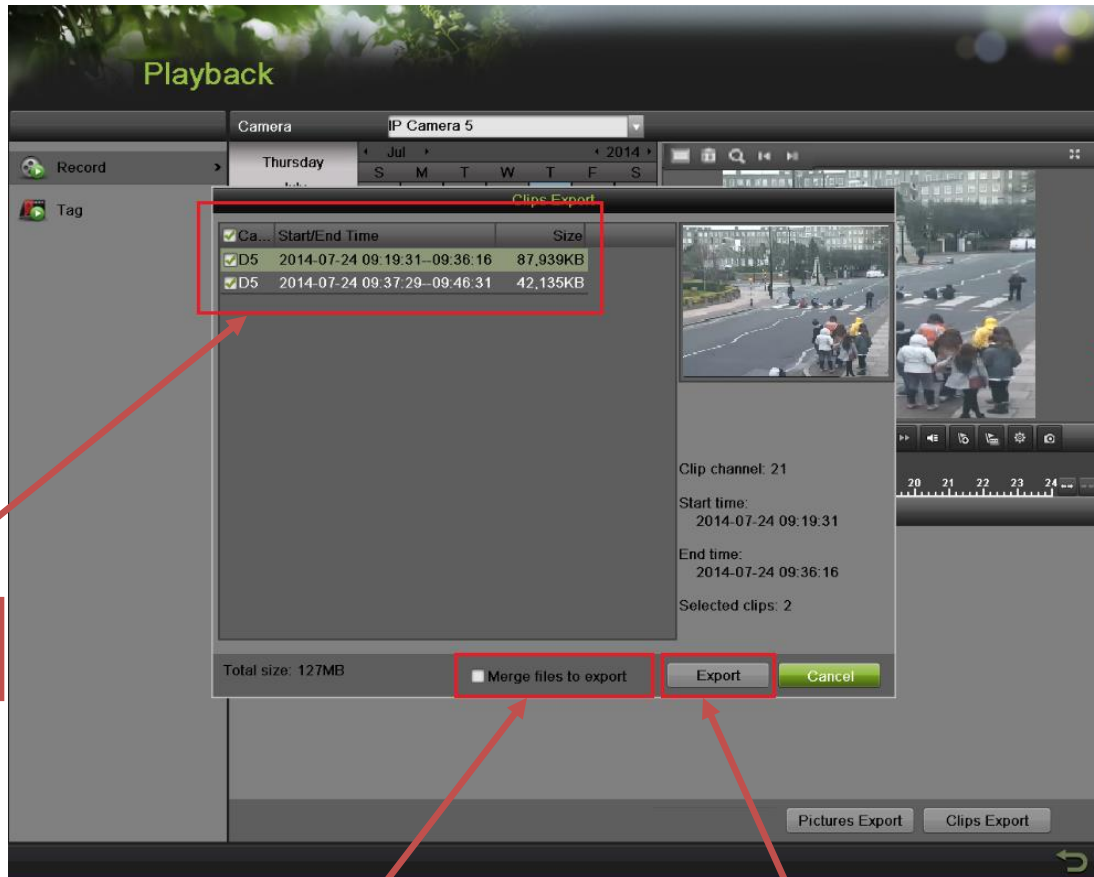


**Select the desired clips**

**If selected, multiple clips created from the same camera will be stitched together**

**EXPORT THE CLIPS TO USB DEVICE**

10. Select the desired clips
11. Press "EXPORT"
12. After the backup is complete, simply remove the USB FLASH Drive or the USB HDD.