# Uniden®

## App Cam
## 4K NVR Series
## Security System

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OWNER'S MANUAL

# IMPORTANT SAFEGUARDS

# WARNING

### RISK OF ELECTRICAL SHOCK

### DO NOT OPEN

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

## WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

In addition to the careful attention devoted to quality standards in the manufacturing process of your product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This section lists important information that will help to ensure your enjoyment and proper use of the product and accessory equipment. Please read them carefully before operating and using your product.

# GENERAL PRECAUTIONS

1. All warnings and instructions in this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water-dampened cloth for cleaning.
3. Do not use this product in humid or wet places.
4. Keep enough space around the product for ventilation. Slots and openings in the storage cabinet should not be blocked.
5. It is highly recommended to connect the product to a surge protector to protect from damage caused by electrical surges. It is also recommended to connect the product to an uninterruptible power supply (UPS), which has an internal battery that will keep the product running in the event of a power outage.

# INSTRUCTIONS

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the product is set up and used. Follow all operating instructions.

2. **Retain Instructions** - These safety and operating instructions should be retained for future reference.

3. **Heed Warnings** - Comply with all warnings on the product and in the operating instructions.

4. **Power Sources -** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your location, consult your video dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.

5. **Overloading -** Do not overload wall outlets or extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.

6. **Power-Cord Protection -** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

7. **Surge Protectors -** It is highly recommended that the product be connected to a surge protector. Doing so will protect the product from damage caused by power surges.

8. **Uninterruptible Power Supplies (UPS) -** As this product is designed for continuous, 24/7 operation, it is recommended that you connect the product to an uninterruptible power supply. An uninterruptible power supply has an internal battery that will keep the product running in the event of a power outage.

9. **Ventilation -** Slots and openings in the case are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a

built-in installation such as a bookcase or rack unless proper ventilation is provided and the product manufacturer's instructions have been followed.

10. **Water and Moisture -** Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool, etc.

11. **Heat -** The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

12. **Accessories -** Do not place this product on an unstable cart, stand, tripod, or table. The product may fall, causing serious damage to the product. Use this product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.

13. **Camera Extension Cables -** Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.

14. **Mounting -** The cameras provided with this system should be mounted only as instructed in this guide or the instructions that came with your cameras, using the provided mounting brackets.

15. **Camera Installation -** Cameras are not intended for submersion in water. Not all cameras can be installed outdoors. Check your camera environmental rating to confirm if they can be installed outdoors. When installing cameras outdoors, installation in a sheltered area is required.

# SERVICE

1. **Servicing -** Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

2. **Conditions Requiring Service -** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
   - When the power supply cord or plug is damaged.
   - If liquid has been spilled or objects have fallen into the product.
   - If the product has been exposed to rain or water.
   - If the product has been dropped or the cabinet has been damaged.

- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- When the product exhibits a distinct change in performance. This indicates a need for service.

3. **Replacement Parts -** When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the product manufacturer can prevent fire, electric shock, or other hazards.

4. **Safety Check -** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in safe operating condition.

## USE

1. **Cleaning -** Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

2. **Product and Cart Combination -** When product is installed on a cart, product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

3. **Object and Liquid Entry -** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

4. **Lightning -** For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power line surges.

Using the Live View Screen

Live View is the default mode for the NVR. All connected cameras are displayed on-screen. The NVR can display video feeds from up to 8/16 cameras depending on the model.
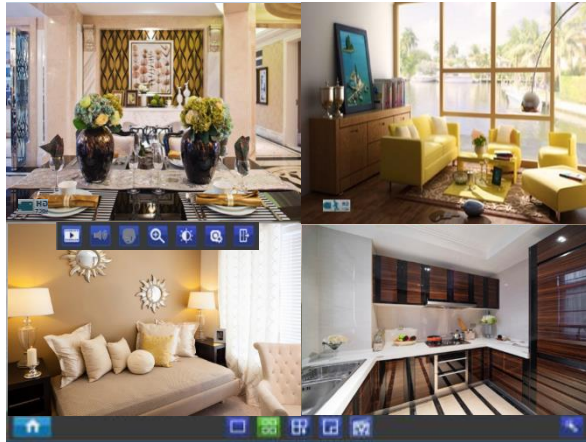


**Status icon**

Information on the NVR and camera status is displayed as icons on the Live View screen. Each camera will show its own status icons. Icons are there to give you a quick snippet of what's going on with your cameras - whether your camera has detected motion or even when your camera is having a connectivity issue. The following is a guide of what each icon represents:

  This icon indicates that the camera can record at a 4MP high definition resolution.

  The camera icon indicates that this camera is currently recording. This icon will be the same whether the recording was scheduled, initiated manually or triggered by motion (though the motion icon will also be present if there's motion detected).

  The motion icon indicates that the NVR is detecting motion coming from this camera.
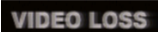
  Video Loss indicates that the channel displaying this has lost the feed from its camera. This may be caused by a disconnected/damaged cable, the camera may have lost power, the camera may have been de-registered from the channel or defective, or the camera has not input the correct password in the IP CHANNEL list.

  If you see this icon on-screen (it will be showing in the bottom right corner by default) It indicates an alarm warning happens. It might be alarm, video loss or HDD exception. Click the icon to access the **Event Log** where you will get more information about the problem.

## Menu Bar

Right click with the mouse on the live view screen to open the Menu Bar

**Menu:** Opens the main menu.

**Single Camera View:** Shows images from one camera in full-screen.

**Four-Camera View:** Divides the screen into four viewing windows, each showing images from one camera.

**Next Camera(s):** Cycles the cameras displayed in viewing mode. Only work for 1/4/8 camera simultaneous live view mode.

**PIP:** Picture-in-Picture. Allows you to view two channels at once, with one full screen and the other as a small overlay.

**Start Tour:** Has 1 or 4 screens display automatically in turn.

**Manual Record:** Initiates manual recording (please refer next page of the settings)

**Run Startup Wizard:** Runs the initial startup wizard.

## Camera Tool Bar

Left click the USB mouse once on one of the live video channels available to access the camera tool

bar. Note: Unavailable functions are greyed out.

- **Playback:** Opens the "Search: Playback" menu.

- **Audio**: Requires Audio Enabled NVR Audio Output

- **PTZ Control Menu**: Opens the PTZ control menu
- **Zoom**: Zoom in and out the live view.

**Zoom In:** Digital Zoom In

**Zoom out:** Digital Zoom Out

Draw a box over an area of the video that you want to zoom in.

Restore zoom back to default setting.

**Zoom In:** Optical Zoom in

**Zoom Out:** Optical Zoom out

Manually focus far(Only use when AUTO FOCUS has problem)

Manually focus near(Only use when AUTO FOCUS has problem)

Exit

- **Image Setting:** Displays the selected video channel in full screen and shows the **Image Settings** window for you to change the brightness, contrast, saturation and hue. For more details, see Image Settings in "Display: Camera"
- **Camera Setting:** Opens the "Display" menu.
- **Exit:** Closes the toolbar.

On this page, it shows all the channel Schedule recording is On/Off.

if the schedule recording is ON, you can see next to Schedule is a Blue ON Button, and the start and stop is in grey, now you can't set the manual record.

if the schedule recording is OFF, you can see next to Schedule is a RED OFF button, now you can manual set the record start or stop by click the circle dot.

*Note: This function can only work when the RECORDING→SCHEDULE is disabled.*

**On the IP Channel page, you can**

- view specific information about cameras
- scan for cameras that the NVR is able to detect that are connected to NVR poe ports or under the same router with the NVR.
- add cameras to any available channels
- delete cameras from their existing channels
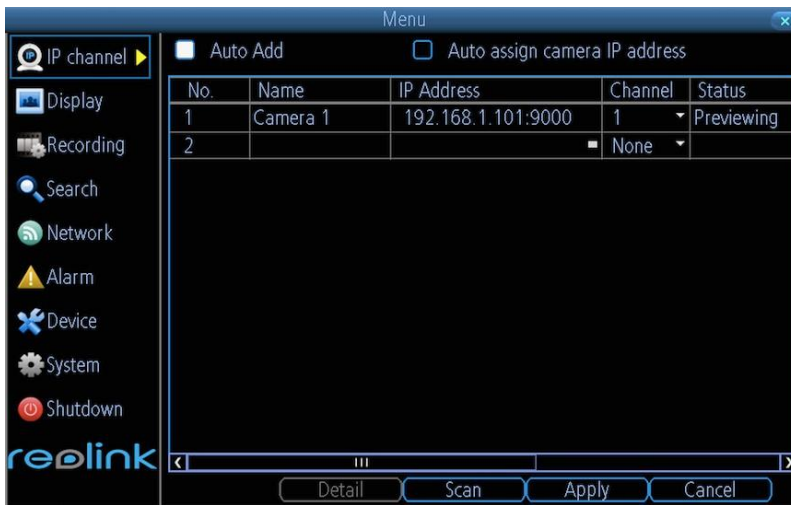


- **Name:** Shows the name of the camera associated with the channel.
- **IP Address:** The IP address assigned to the camera.
- **Channel:** The channel number that the camera is connected to.
- **Status:** Tells whether the camera is *Previewing, Offline or INVALID PWD.*
- **User Name:** *Admin* as default of the camera.
- **Password:** If your camera was set password from reolink client before, you need to input the correct password. If not, the default password is blank and no need to fill in anything.
- **Protocol:** Auto. It will connect by detecting the IP camera protocol. Reolink cameras and NVRs work by private reolink ip protocol.

Click the **Scan** button to generate a list of all cameras that your NVR can detect.

**On The display: Camera page, you can**
- Rename the camera
- Set the information that will be displayed on-screen
- Set where this information will be displayed
- Set whether information such as the date will be recorded directly to your videos
- Set any areas of the video you want to "mask"
- Set the camera video parameters

- **Camera No.:** Choose the channel you want to edit here.
- **Camera Name:** Shows the name of the camera that's currently connected to the channel. You may also specify a different name by using a virtual keyboard window.
- **Disable Preview:** Check the box to disable the preview of selected channel.
- **Display Camera Name:** When checked, the name will be displayed on-screen
- **Record Date:** When checked, the date will be recorded directly to your videos.
- **OSD Display Position:** Gives you access to a screen where you can easily set the exact positions of any over-lay text, such as the camera name and the date and time.

**Image Settings**
- **Brightness***:* Changes how light on the image appears to be.
- **Contrast***:* Increases the difference between the blackest black and the whitest white in the image. Useful if sections of the image "grey out" but setting the contrast too high will degrade image quality.
- **Saturation***:* Alters how much color is displayed in the image. The higher the saturation, the more bright and vivid colors will appear to be. Again, setting this too high can degrade image quality.
- **Hue***:* Changes the color mix of the image (this can have very dramatic results). It's somewhat like moving through a rainbow.

- **Mask:** When checked, allows you to create, place and shape a "privacy mask" which obscures part of the image on the associated channel.

**Camera Parameters:** Adjust various camera settings according to the environment where the camera is installed.
- **Anti-flicker***:* Use this feature if some devices such as TV screens and lights are flickering. For USA and Canada, set this to 60Hz. For Australia and the UK, set this to 50Hz. Outdoor mode is also available.
- **Exposure Mode***:* Select the exposure level of the camera based on pre-defined conditions. Select Manual to adjust the shutter speed and gain value of the camera.
- **Contextual:** Change the way the camera processes white balance to correct image colors. Auto, Day, Night or Manual (adjust the red and blue gain manually).
- **Day/Night***:* Set the camera's color mode during different times of the day and night - AGC (Auto set by image sensor, Color (Always in Day mode), Black&White (Always in Night mode) or CDS (Auto set by light sensor).
- **Backlight***:* Optimize brightness and contrast levels to compensate for differences between dark and bright objects using either BLC or WDR mode. This may improve image clarity in high contrast situations but should be tested at different times of the day and night to ensure that there is no negative effect.
- **Mirroring***:* Change the orientation of the image to be horizontally reversed.
- **Rotation:** Turns the image upside down.

On the Display output page, you may

set the:

- output resolution on screen
- the transparency of the menu
- the sensitivity of the USB mouse
- the boarder of the live view

● **Resolution:** The number of "little dots" that make up an image. This should be set as high as possible, but equal to or lower than the maximum resolution your screen/monitor can display. Make sure your monitor supports or exceeds the resolution you choose or it may not be able to display.

The NVR has below formats available, in four different aspect ratios:

- **Standard (4:3)** - 1024 x 768
- **Standard (5:4)** - 1280 x 1024
- **Widescreen (16:10) -**1280 x 800, 1440 x 900
- **Widescreen (16:9)** - 1280 x 720 (720p) or 1920 x 1080 (1080p)

**Standard Monitor via VGA***:* Use one of the 4:3 formats to correctly align the NVR's output on your screen. Using a widescreen format will "stretch" the image vertically.

**Widescreen Monitor via VGA***:* If possible, use the widescreen (16:9 or 16:10) format. If your monitor can't display these resolution, you might need to enable letter-boxing on your monitor and use a 4:3 format.

**PC Monitor via HDMI***:* Choose a format appropriate for your monitor. If it's a widescreen, use a widescreen format. Set to the highest option that is **equal to or less** than the screen's maximum resolution.

**Widescreen Plasma/LCD HDTV via HDMI:** The resolution should be set to the maximum your television can *process* not *display*. Typically, this will be 1080p, as even screens which don't have that many pixels can still display the image, just with less detail. Check your television's documentation to learn this value. If your television can't display 1080p, then use 720p instead.

● **Transparency:** You may set the NVR's menu to be partially transparent
● **Mouse Sensitivity:** Tells how sensitive the mouse will be.
● **Border Adjustment:** Changes the size and position of the cameras' images on the screen.

On Record: Encoding page, you can

- choose the resolution (per channel) of recording
- change the frame rate (how many images per second the NVR records)
- change the data-rate of each video stream.

  The higher the data rate, the "better" your images will look, but may take up more space in your HDD.

- **Camera No.:** Tells the channel you want to set.
- **Encoding Parameters:** Tells whether you're editing the parameters for the mainstream or the sub-stream.
- **Main-Stream:** The main-stream is the video feed that the NVR will record and display. This is the higher-quality stream.
- **Sub-Stream:** The sub-stream is the video stream that the NVR will send to remote devices via network or the Internet. It is the lower-quality stream since a reduction in video size makes it easier to send over a network.
- **Record Audio:** check this to record and display with Audio. This function is only for camera which have built-in Mic.
- **Resolution:** How many "little dots" are going to make up your image.
- **Frame Rate:** The number of frames per second (fps) that the NVR will record. The default (and maximum) is referred to as "**real-time"** and is 30fps (NTSC) or 25fps (PAL).

Reducing the number of fps will **not** save hard drive space but potentially **will** improve the data-rate per frame (depends on how you set the bit-rate - see the next point).

Remember that your FPS count is the same as saying "take X photograph per second" (where X is your FPS setting). 5fps doesn't sound like much, but it's still five individual photographs per second. If maintaining image clarity while reducing HDD consumption is your priority, it makes sense to lower the frame rate.

With above mentioned settings, some experimentation is encouraged to find the settings which will work best for you!

**Max. Bitrate(Kbps):** The actual amount of data that the NVR will use to record video. The higher the bitrate, the more space each recording will take up on the hard disk. Generally speaking, recordings encoded at higher bitrates will be of better quality, especially when recording movement.

On the recording: Option page, you may set

- Whether the NVR will record a short video before events take place,

- how long after events take place the NVR will continue to record

- how the NVR will store and divide long recording?

- Whether the NVR will continue to record and cover the earliest recording.
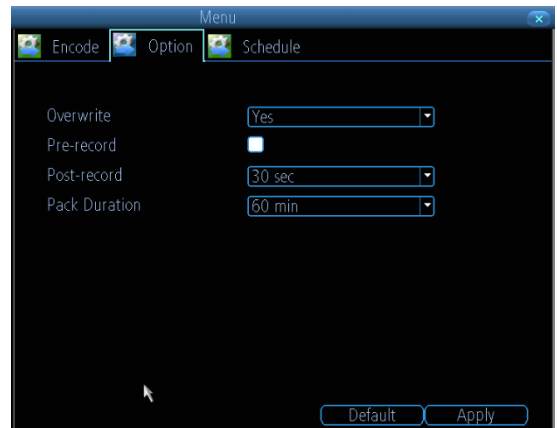


- **Overwrite:** When enabled, the NVR will record over the files already stored on the hard drive. The NVR will always record over the **earliest** files on your hard drive.

- **Pre-Record:** While Pre-Record is enabled, the NVR will record a few seconds *before* an event occurs. If you're using *Motion Detection* (recommended) based recording as your primary recording method(s), then it's a really good idea to use Pre-Record.

- **Post-Record:** How long after an event occurs that the NVR will continue to record. It can be very useful - for example, if an intruder or potential target triggers the motion detection but pauses in view, having post-record enabled will get a much better look of the event.

- **Pack Duration:** *Pack Duration* is a measurement of how long the NVR will record before splitting the output file into discrete units. "Packs" are something like the chapter numbers on a DVD - though the video is broken up into separate units, it will still play through as one continuous movie.

On Recording: Schedule Page,
you may set the recording time
schedule of each channel.
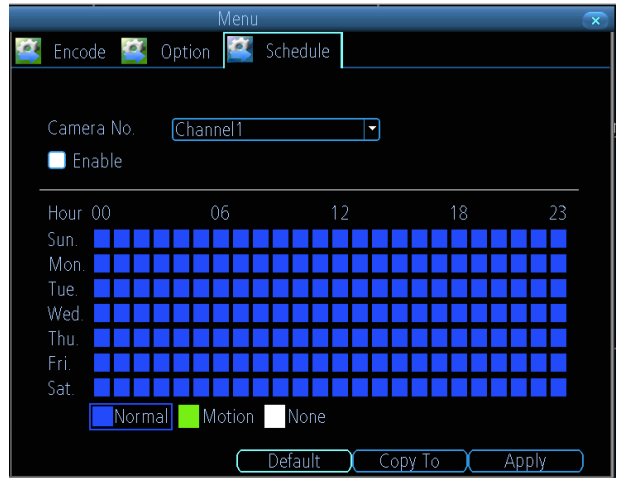
There are three types of recording to set:

● **Normal:** The NVR will constantly record for any period. You won't miss anything.

● **Motion:** The recommended recording setting for most applications. The NVR will only record when it
detects something moving in front of the camera, and will then only record footage from the camera(s)
that do detect motion unless you alter your Action settings "Alarm: Motion Detection - Action" to include
other channels.

> Before setting any of your schedule to Motion, ensure that **Motion Detection** is properly
> configured for the channel(s) you want to associate with it. See "Alarm: Motion" for more
> information about setting up and configuring Motion Detection.

● **None**: As the name suggests, the NVR will not record anything.

**Copy To (Channel):** Located at the base of the screen, with **Default** on one side and **Apply** on the other.
This will allow you to copy the schedule from the channel you're editing to another channel or channels.

Note: if the box after ENABLE is not checked, it will not record as scheduled, but you need to do MANUAL
RECORD.

On the S**earch: Playback**

page, you can

- select the playback channel
- choose the video type
- Set the start and end time for playback
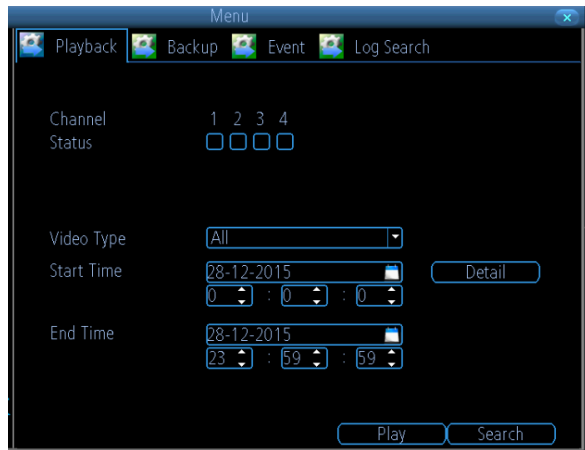
Click **Detail** button to check the recording type for different time period. You may click on any grid at any time and at channel to start playing.
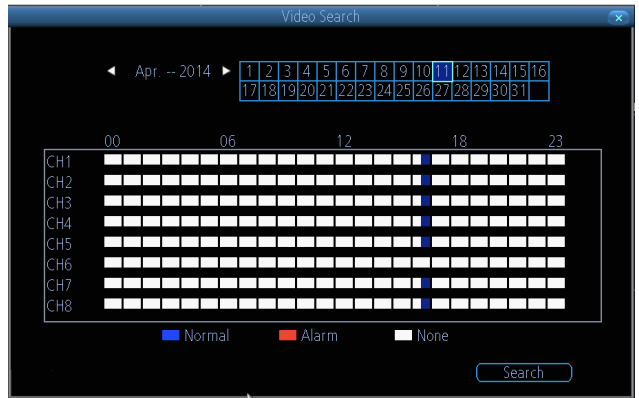
Or you may click **Search** and see all the file you want to play, then click play button.
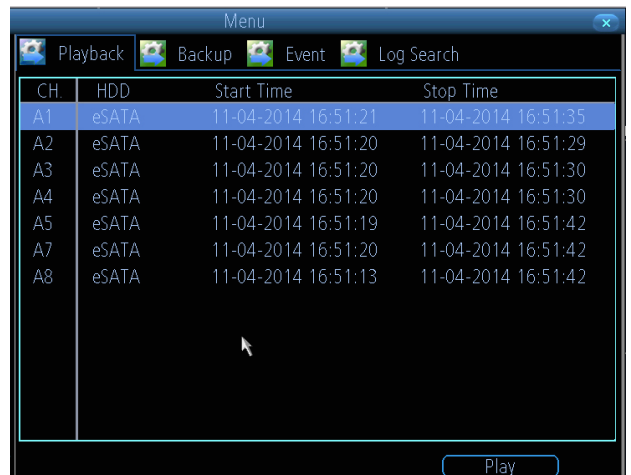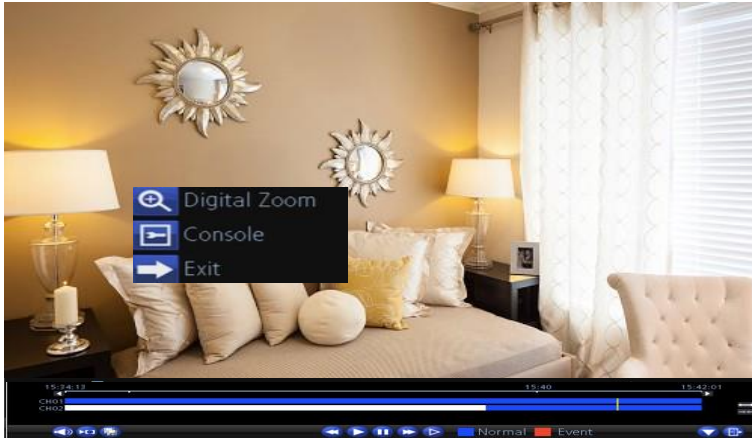
The **Playback** interface is quite similar to a computer's media player. Most of the controls are quite straight forward and it operates in the same way as a standard media player.

- **Playback Bar:** A basic progress meter. You can click to move the current position icon to quickly scan through video events.

- ![volume icon]**:** sets the output volume of playback.

- ![mark icon] **:** Used to mark a *Start Point* and *End Point* for incident backups. Press ![mark icon] to mark a start point and press ![mark icon] again to mark an end point.

- ![backup icon]**:** Press the button to backup the video clip cut.

- ![reverse icon]**:** Reverses the footage.

- ![play icon]**:** Plays footage at normal speed.

- ![pause icon]**:** Pauses playback but retains still images on- screen. Subsequent presses will move a single frame forward in the video. This will usually be 1/30th (NTSC) or 1/25th (PAL) of a second.

- ![fast forward icon]**:** Speeds up playback.

- ![slow icon]**:** Plays footage at a reduced speed. Press multiple times to further reduce the speed: 1/2 speed, 1/4 speed, 1/8th speed, 1/16th speed and so on.

- ![blue/red icon]**:** Tells whether the video being played back was recorded under **normal recording** (blue) or based on **motion event** (red).

- ![maximize icon]**:** Maximizes the area on-screen for playing back your footage by hiding the on-screen controls.

- ![exit icon]**:** Leaves the playback interface and returns to the Live Viewing mode.

- ![enlarge icon]**:** Enlarge the time period on the time bar.

- ![shorten icon]**:** Shorten the time period on the time bar.

On the Search: Backup Page, you should
- Connect a USB flash drive to the **USB Port** on the front panel or at the rear panel of the NVR
- Choose the camera(s) you want to backup footage from.
- From the **Video Type** menu, select the type(s) of video you want to backup.
- Set your **Start Time** and **End Time.**
- Select **Backup**.
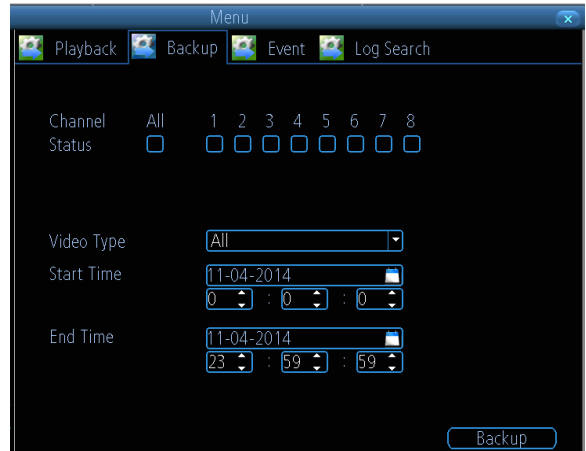
The backup file list will show you a list of all the video events between the start and end times you have selected. All the ticked files will be part of the backup.
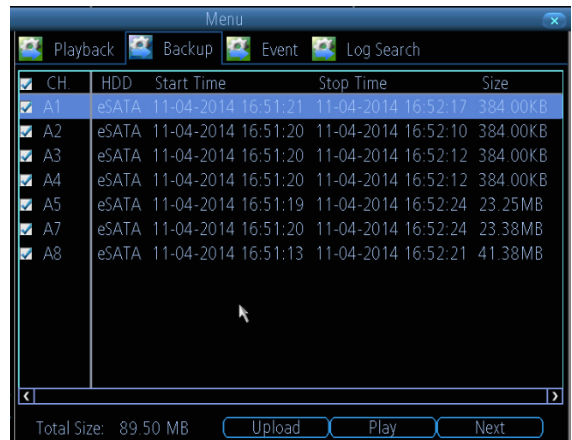
The **Event Search** menu will show you recordings that were triggered by the NVR when detecting motion.

Typically, the majority of recordings based upon "Events" are likely to be recordings triggered by the NVR's **motion detection** feature.

The search function operates in the same way as the main playback search: the only difference is you'll select an **Event Type** rather than a **Video Type**.
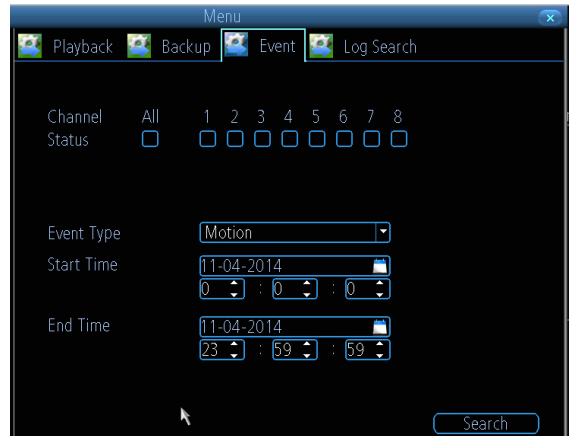
The **Log Search** displays a list of events, presented in chronological order: the most recent events will be at the end of the list.

The Log will list all events that the NVR experienced, like user login, restart, camera lost, HDD error, etc.
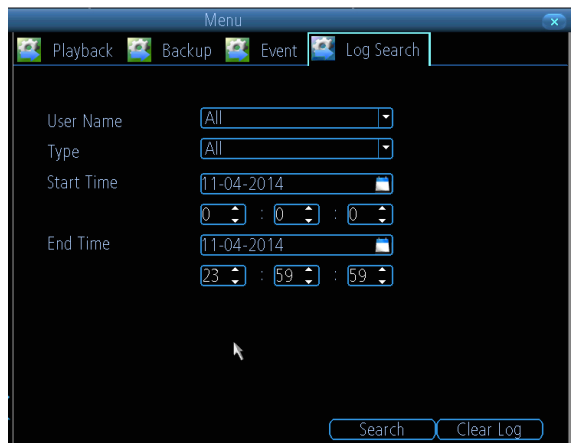
On the Network: General Page, you may know the status of your network, like
- Network Access
- IP Address
- Subnet Mask
- DNS
- Mac Address

- **Network Access**: Here you can choose
  - **DHCP:** DHCP is a system where one device on your network (usually a router) will automatically assign IP address to device connected to the network.
  - **STATIC**: Static networks require all devices to have their IP addresses manually defined, as there is no device dedicated to automatically assign IP address.
- **IP Address**: Just as Home and Office needs to have an address which identifies their location on the local network, the Camera uses IPv4 addressing, which consists of four groups of numbers between 0 and 255, separated by periods. For example, a typical IP address might be "192.168.1.24" or similar.
- **Subnet Mask**: If the IP address is like a street address, then a subnetwork is like your neighborhood. This will be formatted in a similar way to the IP address (ie. four numbers up to 255 separated by periods) but contain very different numbers. In the above example, the Subnet Mask might be something like: "255.255.255.0".
- **Gateway**: This is the address of the "way to the Internet." To continue the road analogy, this is like your local access point to the highway. This is an IP address in the same format as the others, and is typically very similar to the IP address of the Camera. To continue the above example, it might be something such as: "192.168.1.1", which can access to your router directly.
- **Auto DNS / Static DNS**: Choose how you would like to define your DNS servers. We recommend leaving it on Auto configuration.
- **Auto DNS**: The Camera will automatically choose a DNS server. This is the recommended setting.
- **Static DNS**: If you need to manually define a DNS server, then choose Static DNS. This must be copied from your router.
- **Preferred DNS Server:** "Domain Name System". Everything on the Internet is located via an IP address - however, for ease of use, we associate domain names (such as "www.exampledomainname.com") with those IP addresses. These index are accessible in many locations online, and we call those locations "DNS servers".
- **Alternate DNS Server:** A backup DNS server. This is for redundancy - your Camera will probably work without one.
- **MAC Address:** The Media Access Control address. This is a unique code which cannot be shared. You can't change this one - it's pre-set when the Camera ships out.
- **Note:** Many of the following networking settings are not required when using ReoLink P2P for remote access.

On the Network: Advanced page,
you can Set
• DDNS
• NTP
• E-mail
• FTP
• IP Filter
• related media port

● **DDNS:** DYNDNS is the only choice. If
you do not want to use Reolink UID for
access, you may need to apply a
DYNDNS account from

www.dyndns.com. .

● **NTP:** Network Time Protocol. If you've got the Camera connected to the Internet, you can have it automatically sync
time with an online server.

● **Email Settings:** You may configure the Camera to work with an email account of your choice. This must be correctly
configured for the Camera's auto-email feature to work.

● **FTP:** File Transfer Protocol, you can use FTP to transfer files between Camera and computers on a network.

● **Server Port:** Camera will use server port to send information through. Please note that,

> You'll need to enable UPnP on your router so your router can selectively open these ports, allowing the
> NVR to communicate via the Internet. If your router doesn't support UPnP, You may either get a new router
> (which support UPNP) or you can manually forward ports from the router to the NVR. Port Forwarding is a
> technical process and may require router knowledge.

> The default port number is **9000**, which is not used by many other devices/programs. However, if you have
> another Camera or Camera-like device, this port may be used already. If this is the case, change this value to
> be unique. (If you use UID, there is no need to forward this port)

● **HTTP Port:** This is the port through which you will be able to log in to the NVR via web. It will need to be forwarded
properly in order to ensure smooth, latency-free communication. The default value is "80". If another device on your
network is using this port, please change to other value. This is the port number you'll need to remember when logging
in remotely from a remote PC via the HTTP interface. (If you use UID, there is no need to forward this port)

● **RTSP Port:** Real Time Streaming Protocol", you may use this port to send the streaming file to Realplayer，the default
RTSP port is 554

● **UPNP enable** (**This feature is not required if you are using Uniden P2P to access the Camera**): UPnP makes
configuring your network easier and faster. To use the UPnP setting on the Camera, you'll need a router
which supports this feature, with UPnP enabled. Note that many routers which do support UPnP do not come with the
feature enabled by default. You may need to ask your Internet service provider to turn it on.

When UPnP is enabled on your Camera and your router, the Ports that the Camera requires to be open for access to
and from the Internet will automatically be opened and closed as necessary by your router, saving you the trouble of
manually forwarding these ports. If UPnP is not enabled, or your router does not support this feature, you'll need to
forward the ports the Camera uses from the router to the Camera - since this is a technically challenging process, we
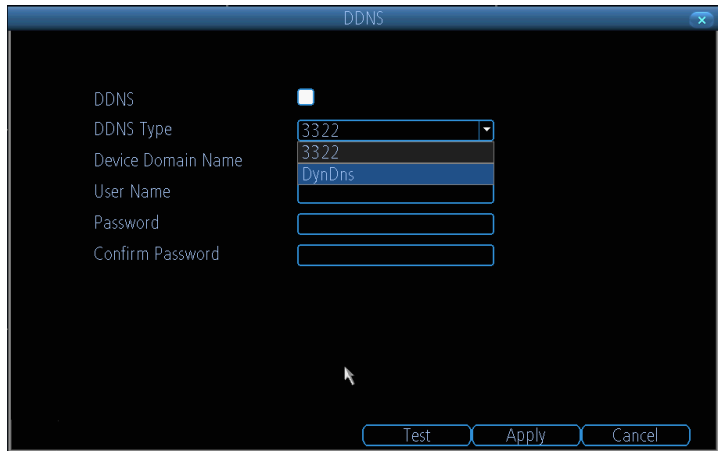strongly recommend using UPnP if possible.

● **UID Enable:** It is enabled with checked box by default. If you do not want to use it in internet, you may uncheck the box.
*Note: it will not connect via internet if you uncheck the box.*

**UID:** The Camera's **U**nique **Id**entifier code for P2P. For convenience, you may have this code sent to your email account
by clicking the **Send UID** button (provided that you've already set up your email account).

DDNS is not required for Reolink P2P remote access. If you intend to access your NVR using older IP
technology you will need to configure this service.
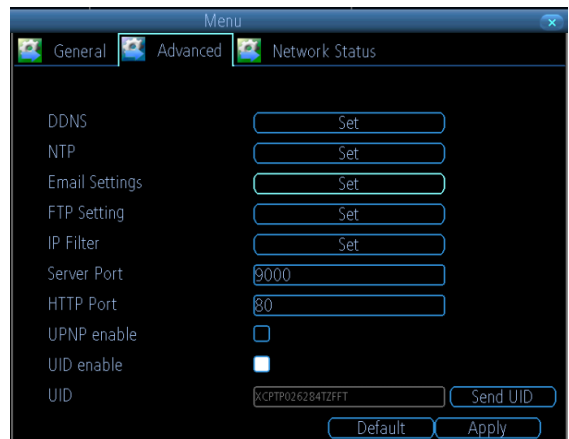
- **DDNS Type:** choose DynDns.
- **Server Domain Name:** Enter the host name that you set up in your DDNS service. This is the address you use to access your network.
- **Username and Password:** Enter the username and password you setup with your DDNS server. These do not have to match your username/password combination in either your Camera or router. (for the sake of security, we suggest making them different).
- **Confirm Password:** Retype the password to confirm

If the test is unsuccessful, a message will appear onscreen informing you that the "Update was Unsuccessful". This could mean that there's a problem with your network setup, or there's a problem with the DDNS Account Name and Password you're using.

## Network -> Advanced -> NTP
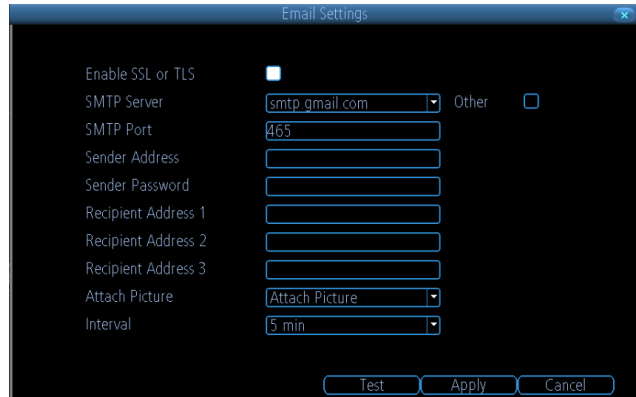
NTP - set this to the time zone where you happen to be. For example, people in the USA and Canada is GMT-05:00. (GMT stands for Greenwich Mean Time - it's the baseline that keeps all the different time zones in sync.)
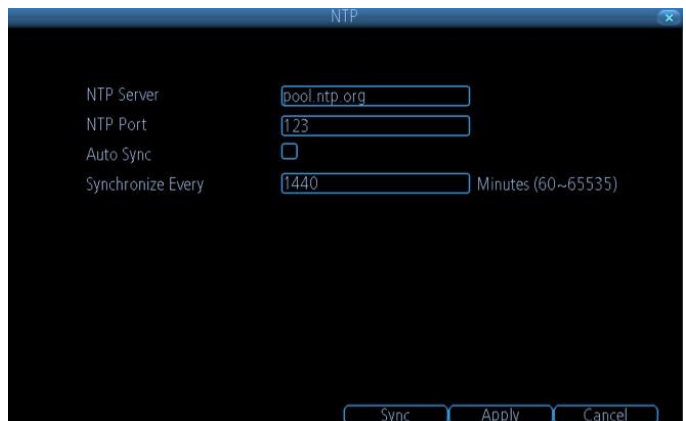
E-mail Notification tells you what's going on around your home or business as it happens, then you may configure it to automatically send email alerts as events happen.

We suggest using Gmail as your email client.



- **Enable SSL or TSL:** Tells whether the email server you're using requires a secure link. This is **on** by default, and should be left on if you're using any of the preset email servers.

- **SMTP Server:** There are three preset options to choose from, Gmail (smtp.gmail.com), Windows Live Mail (smtp.live.com) and Yahoo Mail (smtp.mail.yahoo.com).

- **SMTP Port:** The SMTP port used by the email provider of your choice. This field will automatically self-populate if you use one of the presets.

- **Sender Address:** The address you're sending the email **from**. This will be the username you've set up for the email server you're using, For example: "youraddress@gmail.com" or similar.

- **Sender Password:** The password for the outgoing email account.

- **Recipient Address:** The email address you want the NVR to send emails to.

- **Attach Picture:**

   **Attach Picture:** When this is selected, the NVR will attach a 4MP image to each email alert. For motion-based email alerts, this will be an image of whatever triggered the motion detection.

   **Attach Video:** When this is selected, the NVR will attach a MP4 vide with 30s recording to each email alert.

   **Disable:** When this is selected, the NVR will not attach anything in your email.

- **Interval:** The length of time that must elapse after the NVR sends an email alert before it will send another.

**Other (check-box):** This is for user who want to use a different email server, typically the outgoing email server of their ISP. If you want to use your ISP's outgoing email, then you'll need to contact your ISP to learn the correct values for the other fields (such as the correct *SMTP server*, *SMTP port*, *SSL* or *TSL* requirements and so on).

Here you may set the FTP server related information. You should input the ftp server IP address: Port, User Name, Password, so the snapshot or video can directly store to your ftp server.
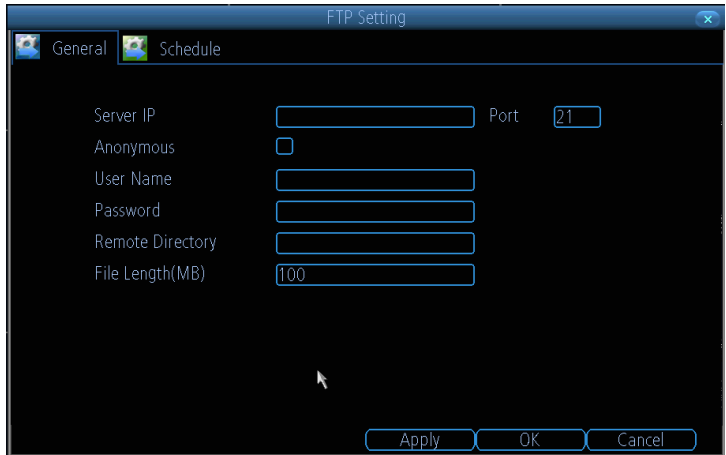
You can set the FTP alarm schedule, you can refer to "Recording: Schedule" on page 28. Check the box after Enable FTP will allow the NVR to do FTP uploading according to the schedule.
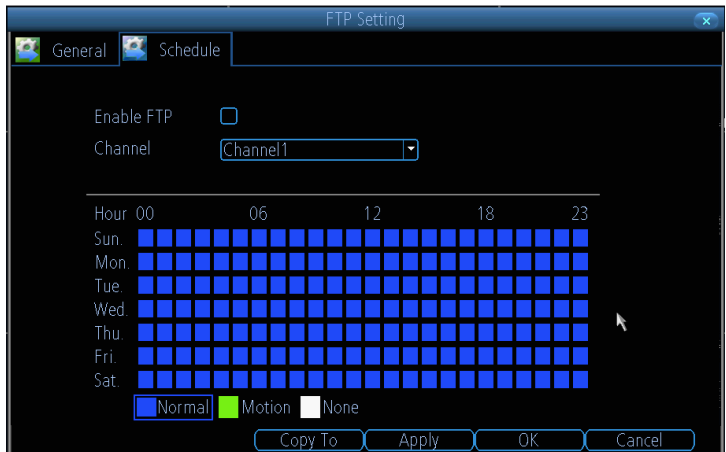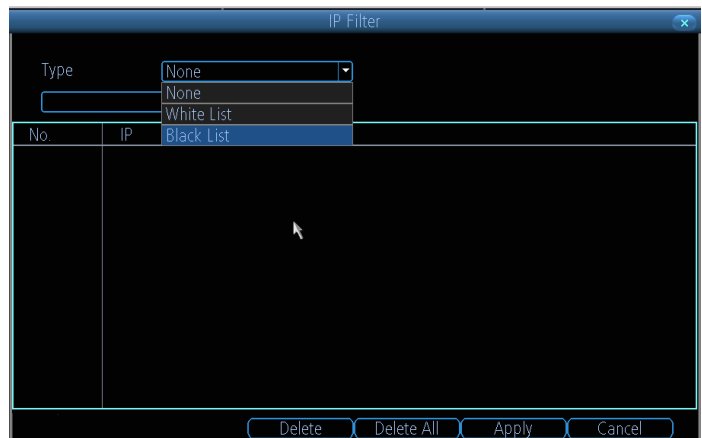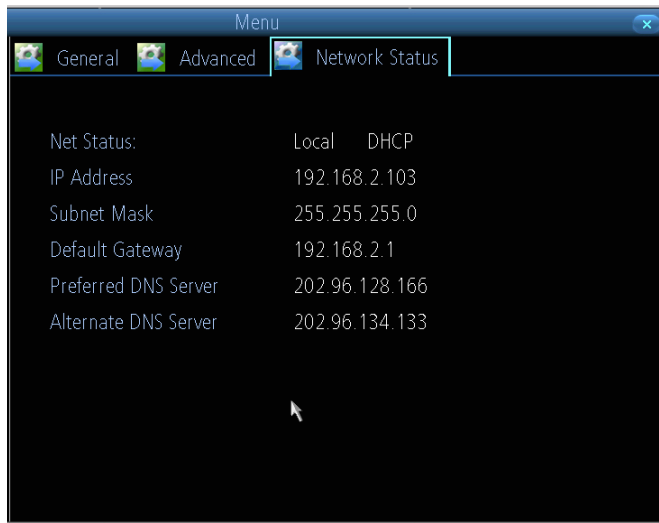
## Network -> Advanced -> IP Filter

The **IP Filter** can be used to modify which IP addresses have permission to talk to the NVR and which do not.
This is an advanced feature and is recommended for advanced users only.
. **Black List:** the IP address that is not Allowed to access the NVR
.**White List:** the IP address that is only Allowed to access the NVR

Here you may find the network information which refers to IP Address / Subnet Mask / Gateway /Preferred DNS /Alternate DNS.

On **Alarm: Motion** Page, you may set the motion detection function.
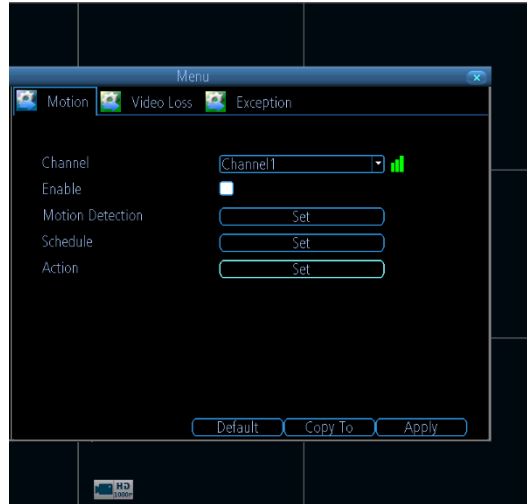
## What is Motion Detection?

**Motion Detection is** the process of detecting a change in the position of an object relative to its surroundings or a change in the surroundings relative to an object.

There are many approaches for motion detection in a continuous video stream. All of them are based on comparing of the current video frame with one from the previous frames or with something that we'll call background.

● **Enable:** Tells whether or not motion detection is enabled on a specific channel.
● **Motion Detection:** Click the applicable **Set** button to setup the motion detection area for that channel. See next page for the details
● **Schedule:** Setting the Motion detection Schedule
● **Action:** Here you may define what will happen when the camera you have selected detects motion.

### Set Motion Detection

Click **Set** button next to Motion Detection, you will see a grid of red boxes. The outlined boxes mark the area that is sensitive to motion. The area without the red outlines is not sensitive to motion.

Use the mouse to move the cursor around the screen. By pressing select or left clicking an area in the grid, you can toggle motion detection ON or OFF in that location.
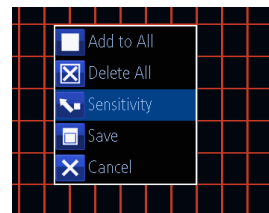
Right click the mouse, you may find the menu, you may set all page or delete all page.

**Sensitivity:** The Sensitivity setting is controlled by a slider, allowing you to set a value between 1 and 50. The lower the number, the more sensitive the motion detection will be. In the daylight time, it is suggested to set higher sensitivity between 10~40. In the night mode, it is suggested to set lower sensitivity between 40~50 to avoid noise triggers the MD. You may set 4 different period with different sensitivity.
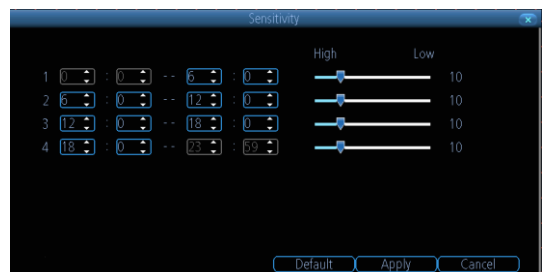
You may set the Motion Detection schedule by clicking the Set button next to Schedule. And click ▮▮ and drag in the time grids to setup the alarm periods.
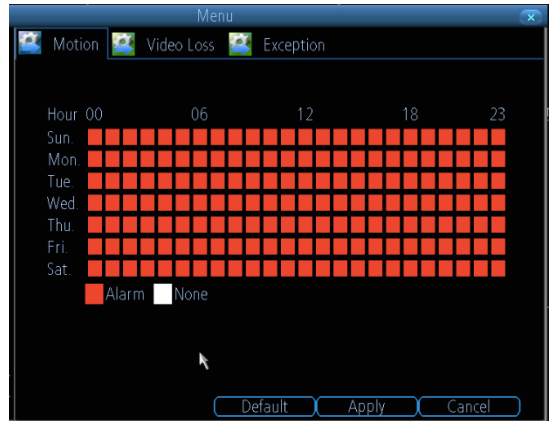
Action:
- ● **Audio Warning:** The NVR will use its internal buzzer to beep.

- ● **Send Email:** The NVR will send an auto-email alert when the event type you have selected occurs. The Email Settings button will take you to the same email configuration screen accessible from the Network menu - see "Network: Advanced: Email Settings"

- ● **Push**: The NVR will send a push message alert to your phone app when the event type you have select occurs.
- ● **Trigger Camera:** You may define one camera's motion detection to trigger recording on one or more other cameras.
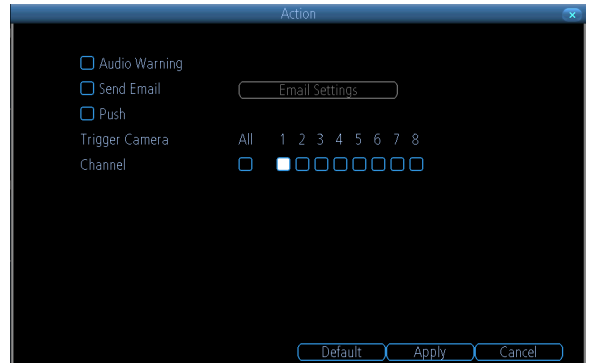
# Device Setting -> Alarm -> Video Loss

Once the video lost the signal, because of unknown reason, you may enable the video loss action for the channels to send alarm.

You may also set the Schedule and Action for the video loss alarm.
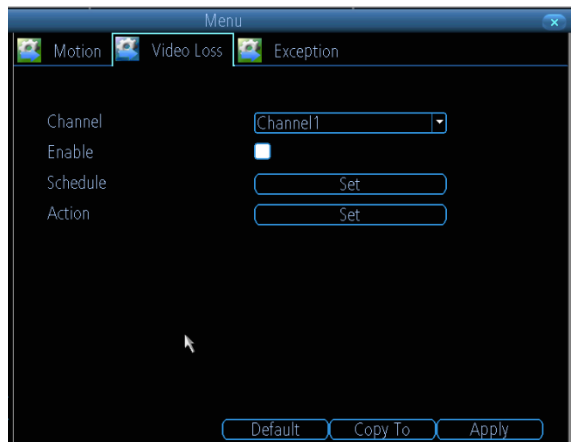
An **Exception** is any deviation from the NVR's normal behavior - phrased another way, it's like saying the NVR's been working fine **except** for these events.
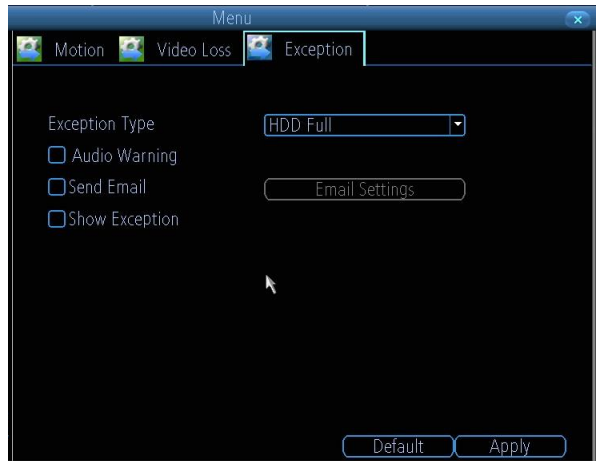
There are 4 Exception Type:
- **HDD Full:** As the name suggests, this event occurs when the NVR runs out of space on the hard drive to save new footage. This event is redundant if you've got overwrite enabled, as the NVR will automatically delete old footage to ensure it can continue to record.
- **HDD Error**: Occurs when the NVR has trouble accessing its hard drives, or when it cannot detect one at all. This error could be generated by either an internal hard drive, or an external one connected to the eSATA port.
- **Net Disconnected**: Will occur if the NVR has problems connecting to the Internet. This may indicate a problem with the NVR's configuration, a fault with your network or a problem with your Internet Service Provider (ISP).
- **IP Conflict**: This event will occur if the NVR detects another device on the same network with a conflicting IP address.

        After above Exception type alarm happen, you may create any combination of the Audio Warning, Send Email or show exception for the alarm action.

        **Audio Warning**: The NVR will use its internal buzzer to emit an alarm tone.

        **Send Email**: The NVR will send an auto-email alert when the event type you've selected occurs.

        **Show Exception**: The NVR will display the **ERROR** icon at the bottom right corner of the live view screen when the event type that you've selected occurs. Click on the icon to access the Event Log and know more about the exception that occurred.

# Device -> HDD

Here you will find a comprehensive list of hard drives connected to the NVR.

External Hard Drive connected via eSATA will be listed here, and be labeled as eSATA.

- **Init.:** Initializes the hard drive. You will only need to do this once, assuming that it is not yet initialized. If the **Format** column reads **"No"** then choose **Init.** to initialize the drive.
- **Label:** A quick way of differentiating between hard drives. For the first setup, there will usually only be one hard drive - you can always add and initialize another hard drive later (connected via the eSATA port).
- **Capacity:** The total amount of space on the hard drive. This will typically be slightly less than the rated capacity of the hard drive as a fraction of the space is required by the file allocation table (FAT).
- **Format:** Tells whether the hard drive has been formatted to operate with the NVR. When the hard drive is formatted appropriately, this will simply read "yes". If it says "no", then select the disk and choose **Init**.
- **Mount:** Tells whether the HDD drive can be detected by the NVR, if no, please check the cable connection.
- **Free Space:** The amount of available space on the hard drive.

# Device -> S.M.A.R.T

**S.M.A.R.T** (Self-Monitoring, Analysis and Reporting Technology - gotta love a good acronym) is your hard drive's way of telling the NVR how it's going.
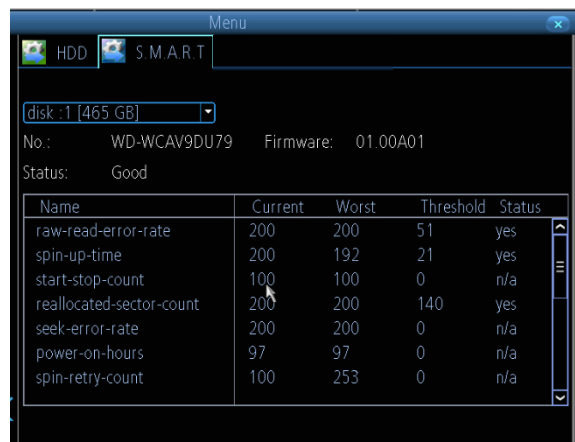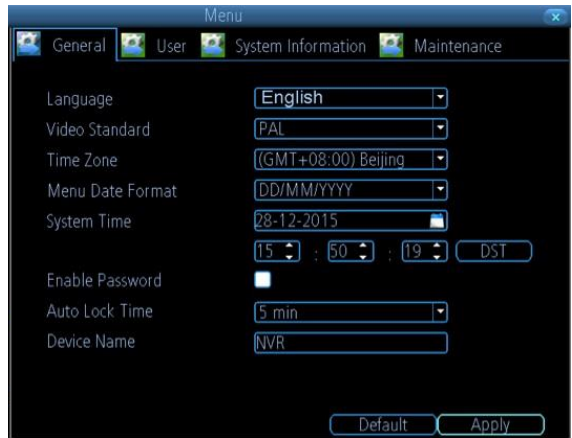
On System: General Page, you may:
- Set the time and date
- Select the language you want for the Menu/GUI.
- Set the configuration for automatic adjustment to daylight saving time
- easily enable or disable password protection

These information has already been set on the Setup Wizard when you first time run the NVR.
You may modify from here.

# System -> User

You may add more account username and password. You may set the authority level as guest or operator

Or modify the current user's password. Admin user name cannot be changed.

You may easily customize the level of access that each individual user has. Simply choose the **Permission** button on either the **Add User** or **Modify** to set the specific access for the user you want. The Permission menu has two tabs - **Configuration** and **Operation**.
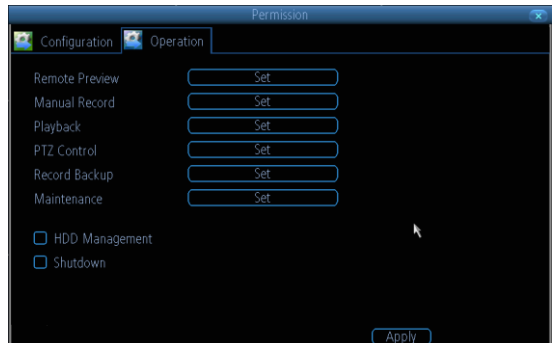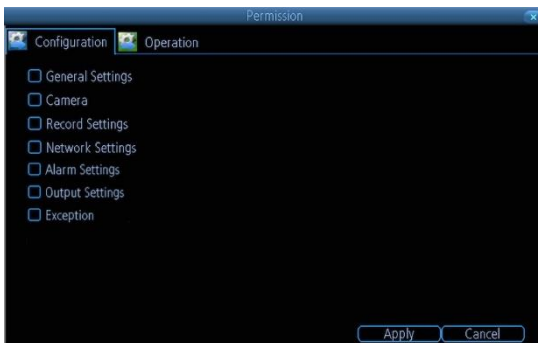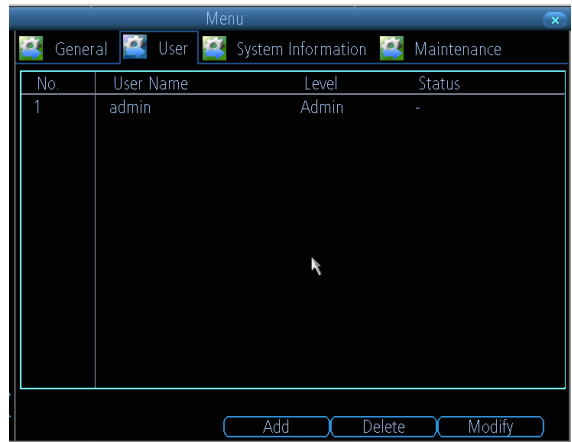
If you're looking at the System Information screen to check whether you have updated your system to the latest version by the information of BUILD NO.

To maintain the NVR, it is suggested that it be rebooted periodically. In much the same way that a computer can become unstable if left on for an extremely long time, the NVR can become unstable too. It is strongly suggested that the NVR be rebooted at least once per week.

However, as this can be a hassle, you may set the NVR to reboot itself.
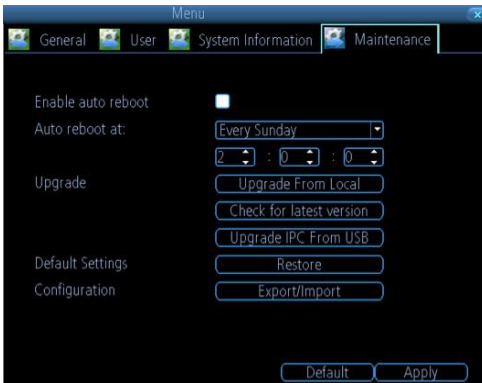


●**Enable auto reboot:** Will automatically shut the NVR down and restart it at a certain time.

●**Auto reboot at:** Choose when you would like the NVR to reboot.

● **Firmware Upgrade (Upgrade):** Instructs the NVR to update its firmware. You will only need to use this option if instructed to do so by our Technical Support. (Remember to Export your configuration first so you don't have to re-set everything!)

**A: Upgrade from Local**

        a) Copy the upgrade NVR firmware to the USB

        b) Then click **Upgrade from Local**

        c) Choose the firmware from supplier USB

        d) then Click Upgrade

**B: Check for Latest Version**

the upgrade version already uploads to the server; you can check with Server if your version is already the latest or not here.

**C. Upgrade IPC from USB**

        a) Copy the upgrade IPC firmware to the USB

        b) Then click Upgrade IPC from USB

        c) Click Browser to choose the IPC firmware from supplier USB

        d) then Click Upgrade
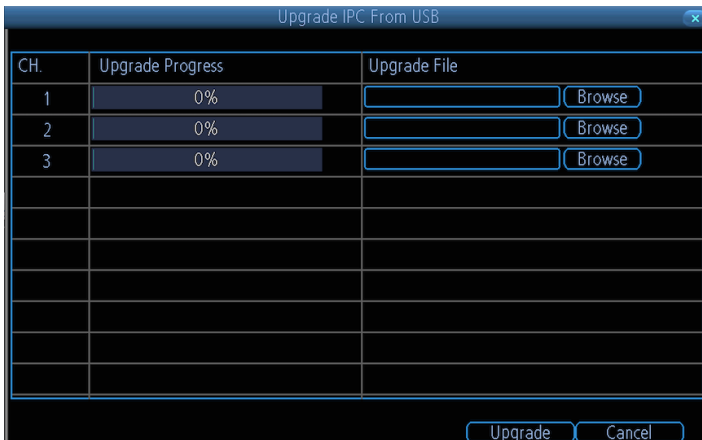


Note: **This must be done after a firmware upgrade to ensure proper operation of the NVR.** You may retain your settings, recording schedule and so on by using the Import/Export Configuration function before upgrading the firmware.

● **Default Settings (Restore):** Loads the factory default settings. You can choose all or the field you want to set back to default.
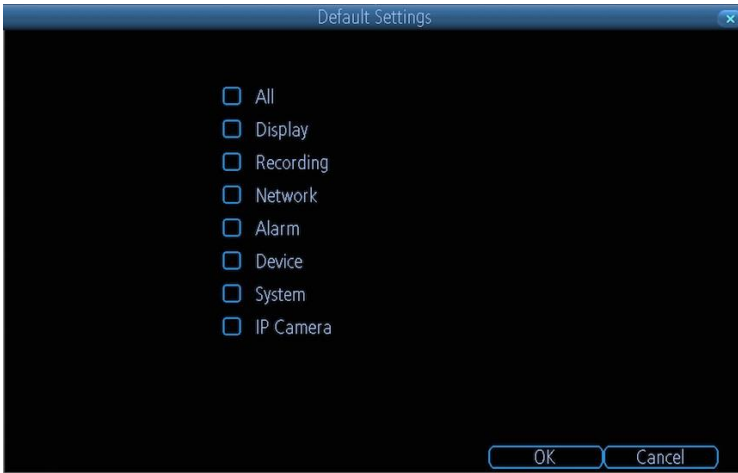


● **Configuration (Export):** Creates a file containing all the settings you have customized, including your recording preferences, schedule, user-list and so on. It is .tgz file.

   **To export your settings:**

   a) Insert a USB flash drive into the USB port. Ensure it has enough space and it is not write-protected.

   b) Choose Configuration: Import/Export.

   c) You will see a file browser, showing the contents of the storage device.

   d) Click **Export** to save your settings.

**Configuration (Import):** Operates in the same way as the **Export** function, but is used to load a previously saved configuration file.
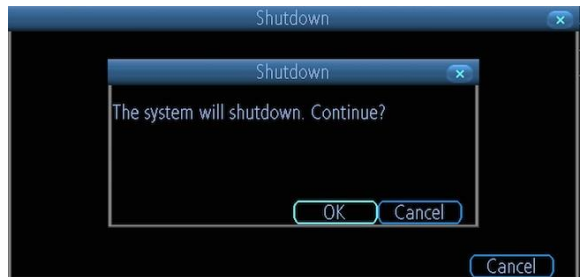
Locate the file you want on your flash drive - it will be called **config(time/date).tgz**. Loading the file will cause the NVR to automatically reboot.
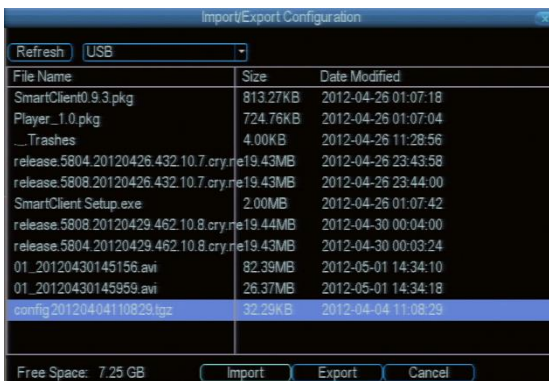
You can click Shut down when you want to log out the system.



when you click Shut down, it will pop up next windows, click OK to continue.



Follow the above same steps to Reboot the device.

You can click Lock to Lock the device, but when you want to login again, you need to input the password which you created to login the system.

# ONE-YEAR LIMITED WARRANTY

**App Cam 4K NVR Series**

**Important:**

Satisfactory evidence of the original purchase is required for warranty service. Please refer to our Uniden website for any details or warranty durations offered in addition to those contained below.

**Warrantor:**

The warrantor is Uniden Australia Pty Limited ABN 58 001 865 498 ("Uniden Aust").

**Terms of Warranty:** Uniden Aust warrants to the original retail purchaser only that the App Cam 4K NVR series ("the Product"), will be free from defects in materials and craftsmanship for the duration of the warranty period, subject to the limitations and exclusions set out below.

**Warranty Period:** This warranty to the original retail purchaser is only valid in the original country of purchase for a Product first purchased either in Australia or New Zealand and will expire, as indicated below, from the date of original retail sale.

| Product | 1 Year |
|---------|--------|
| Accessories | 90 Days |

A. Damaged or not maintained in a reasonable manner or as recommended in the relevant Uniden Owner's Manual;

B. Modified, altered or used as part of any conversion kits, subassemblies or any configurations not sold by Uniden Aust;

C. Improperly installed contrary to instructions contained in the relevant Owner's Manual

D. Repaired by someone other than an authorized Uniden Repair Agent in relation to a defect or malfunction covered by this warranty; or

E. Used in conjunction with any equipment, parts or a system not manufactured by Uniden.

**Parts Covered:** This warranty covers the Product and included accessories.

**User-generated Data:** This warranty does not cover any claimed loss of or damage to user-generated data (including but without limitation phone numbers, addresses and images)that may be stored on your Product.

**Statement of Remedy:** If the Product is found not to conform to this warranty as stated above, the Warrantor, at its discretion, will either repair the defect or replace the Product without any charge for parts or service. This warranty does not include any reimbursement or payment of any consequential damages claimed to arise from a Product's failure to comply with the warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to and sits alongside your rights under either the COMPETITION AND CONSUMER ACT 2010 (Australia) or the CONSUMER GUARANTEES ACT (New Zealand) as the case may be, none of which can be excluded.

**Procedure for Obtaining Warranty Service:** Depending on the country in which the Product was first purchased, if you believe that your Product does not conform with this warranty, you should deliver the Product, together with satisfactory evidence of your original purchase (such as a legible copy of the sales docket) to Uniden. Please refer to the Uniden website for address details. You should contact Uniden regarding any compensation that may be payable for your expenses incurred in making a warranty claim. Prior to delivery, we recommend that you make a backup copy of any phone numbers, images or other data stored on your Product, in case it is lost or damaged during warranty service.

**UNIDEN AUSTRALIA PTY LTD**
Phone number: 1300 366 895
Email address: custservice@uniden.com.au

# Uniden®