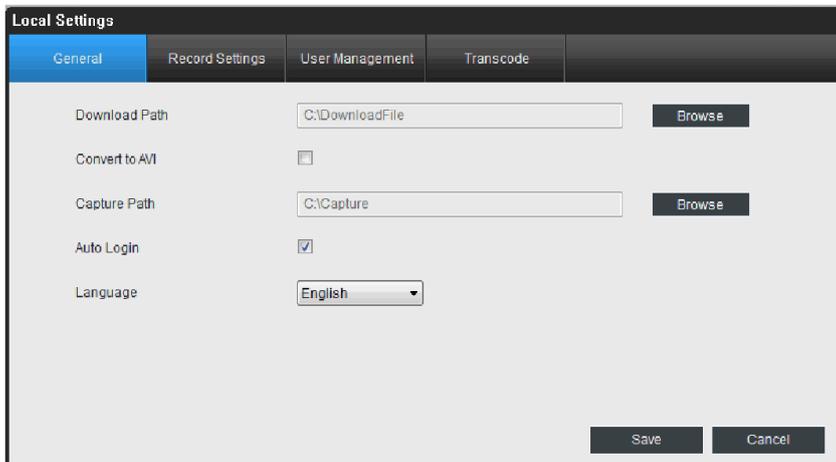


-  Center the image
-  Full screen
-  Access the digital zoom page
-  Choose zoom area
-  Zoom Out
-  Zoom In
-  Restore default zoom settings
-  Exit Digital zoom
-  Take a snapshot of the image
-  Manually start recording or stop recording of the selected channel
-  Play Live View
-  Stop Live View
-  Shows that your camera has Wi-Fi Function



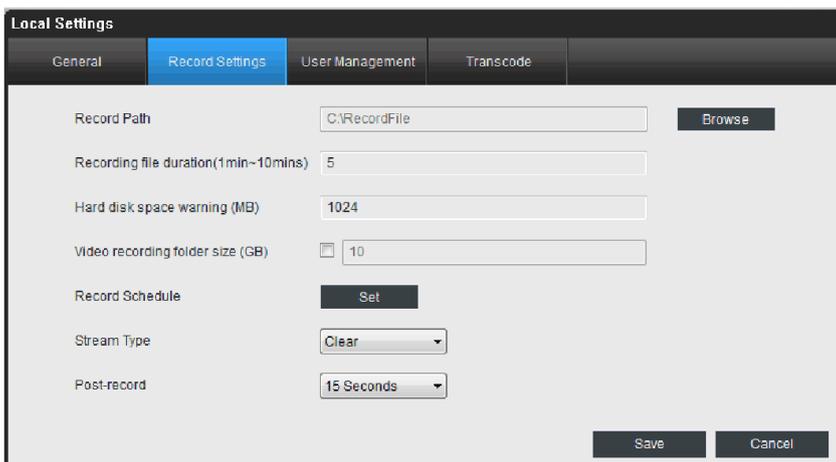
Local Settings button on the upper right of the screen. The local Settings screen is where you can customise how farmCam HD will store and process footage on the local PC when you download it from the Camera.



Download Path: Where farmCam HD will save files that you've downloaded from the Camera.

Capture Path: Where farmCam HD will save still images captured using the snapshot function.

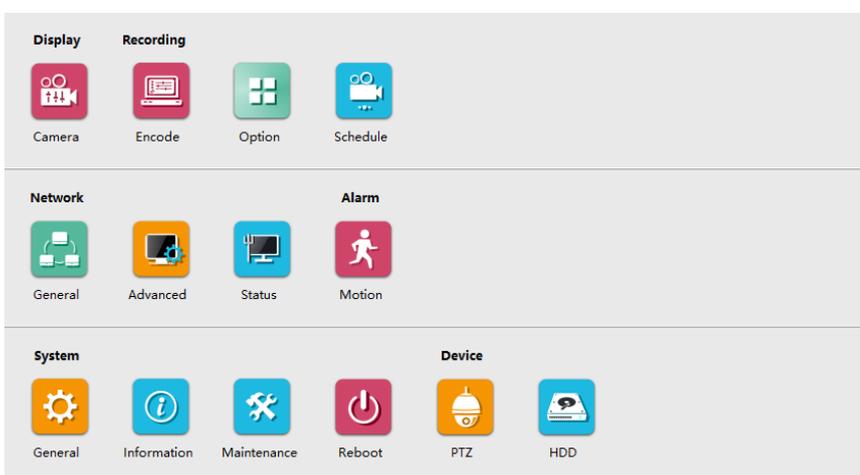
Click save, after successful setting, it will show "Save Succeed"!



Record Path: Where farmCam HD will save recordings if you select Record from the Preview screen.

You can set the recording file duration, folder size, stream type, choose the record file time length and setup recording schedule from this page.

Click save, after successful setting, it will show "Save Succeed"!





Click on the Camera icon and you will be directed to the screen below:

The image shows a screenshot of a software interface titled "Device Settings". The "Display Camera" tab is selected. The settings are as follows:

Setting	Value
Channel	Channel01
<input checked="" type="checkbox"/> Channel Name	Camera1
Position Settings	Lower Right
<input checked="" type="checkbox"/> Date/Time	
Position Settings	Top Center
<input checked="" type="checkbox"/> Mask	

Buttons: Copy To, OK, Setup

Channel Name: Enable/Disable showing the channel name on the screen, you may also rename the channel name.

Position Settings: You may position the channel name on the upper left, lower left, upper right, lower right, top center or bottom center.

Date /Time: Enable or disable showing the date and time on the screen.

Privacy Mask (Check Box): Turns on/off the masking function.

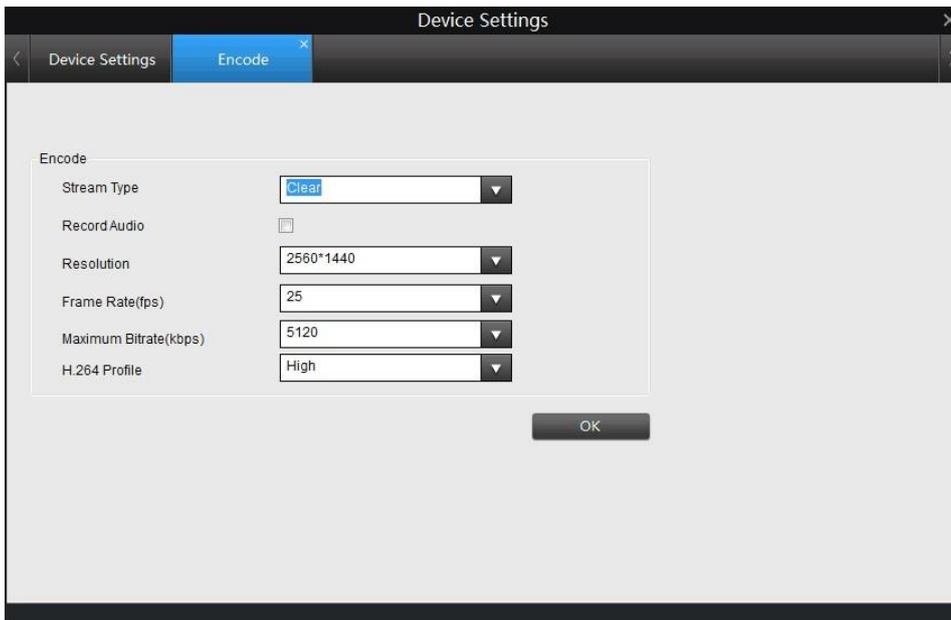
Privacy Mask (Setup): Creates a black privacy overlay which masks part of your images. Will affect recordings.

Click OK to save the settings, also you can copy the settings to other channels, choose checkbox on the copy to window, then click OK. Channel Setting Succeed will be shown after save is complete.



The **Recording: Encode** menu allows you to alter and customise how the Camera records footage and encodes the files. You can choose and change:

- The resolution (per channel).
- The frame rate (how many images per second the Camera records).
- The data-rate of each video stream. The higher the data rate, the “better” your images will look.



Stream Type: Edit the parameters for the main stream or the sub-stream.

Clear (Main-Stream): Highest-quality stream

Fluent (Sub-Stream): Lower-quality stream

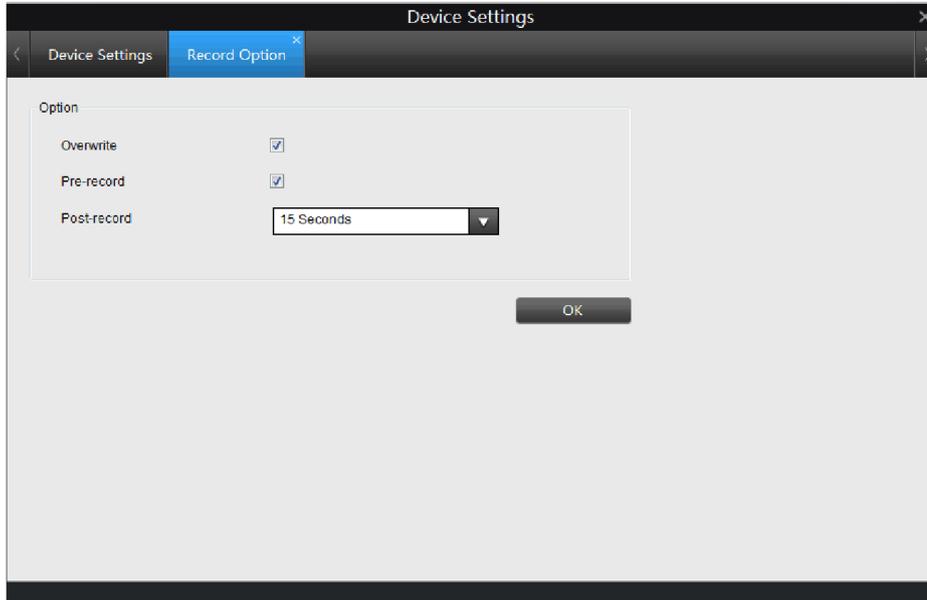
Record Audio: recording with Audio

Resolution: Resolution of the image

Frame Rate: Shows the number of frames per second (fps) that the Camera will record. Reducing the number of fps will not save hard drive space but potentially improve the data-rate per frame.

Max. Bitrate(Kbps): The actual amount of data that the Camera will use to record video. The higher the bitrate, the more space each recording will consume on the hard disk, recordings encoded at higher bitrates will be of better quality, especially when recording movements.

The main-stream uses a variable bitrate to record video - the more movement occurs in the video, the higher the bitrate will be. If you set a high bitrate but a low frame rate, the Camera will still use all the data, resulting in potentially higher quality per frame than at higher frame rates. The sub-stream uses a constant bit-rate to makes the video easier to stream over a network or the Internet



Overwrite: When enabled, the system will delete the oldest recordings when the HDD is full.

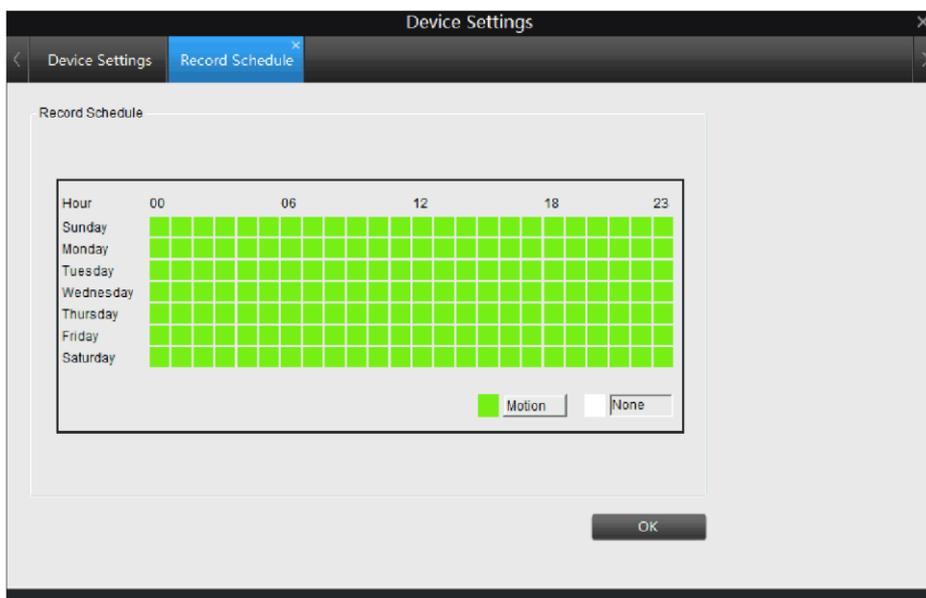
Pre-record: While Pre-Record is enabled, the camera will record a few seconds before an event occurs.

Post-record: How long after an event occurs that the camera will continue to record.



Here you can set the recording schedule for Motion detection.

When set correctly recording will only take place when it detects something moving in front of a camera, and will then only record footage from the camera(s) that do detect motion.





General	
NetworkAccess	DHCP
IP Address	192 . 168 . 1 . 100
Subnet Mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 1 . 1
<input checked="" type="radio"/> Auto DNS	<input type="radio"/> Static DNS
Preferred DNS	202 . 96 . 134 . 133
Alternate DNS	202 . 96 . 128 . 68
Mac Addr	EC:71:DB:5A:0D:4E

Network Access: Here you can choose between the two different types of networks that the Camera can be connected to:

- **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. DHCP is recommended.
- **STATIC:** Static network requires all devices to have their IP addresses manually defined. Please note that the IP address should not be conflicted to other network devices under the same router.

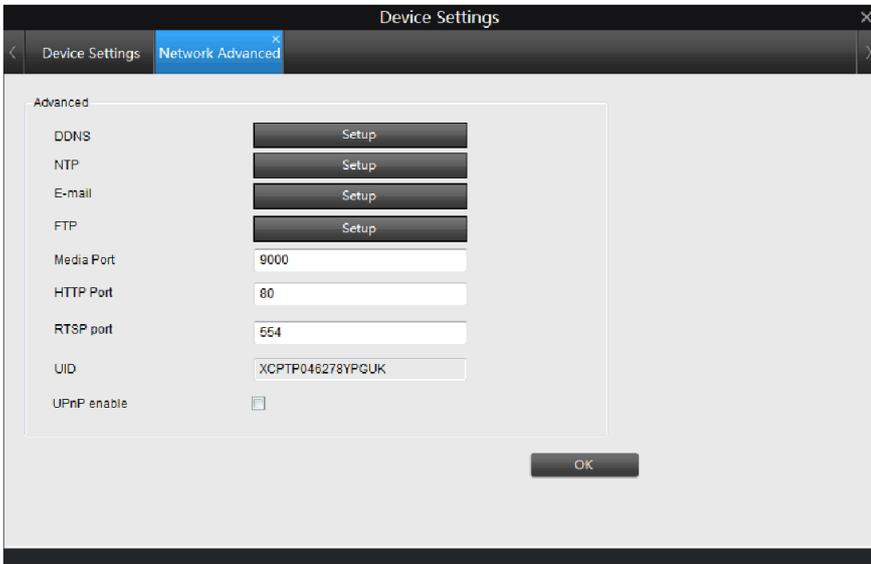
IP Address: The Camera uses a IPv4 address, which consists of four groups of numbers between 0 and 255, separated by periods. For example, a typical IP address might be “192.168.1.24” or similar.

Subnet Mask: This will be formatted in a similar way to the IP address (i.e. 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 your router. It might be something such as: “192.168.1.1”.

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. The DNS must be the same as that in your router, otherwise the email function may fail to work.



NTP: Network Time Protocol. Allows the receiver to connect to the Internet and automatically update the accurate time.

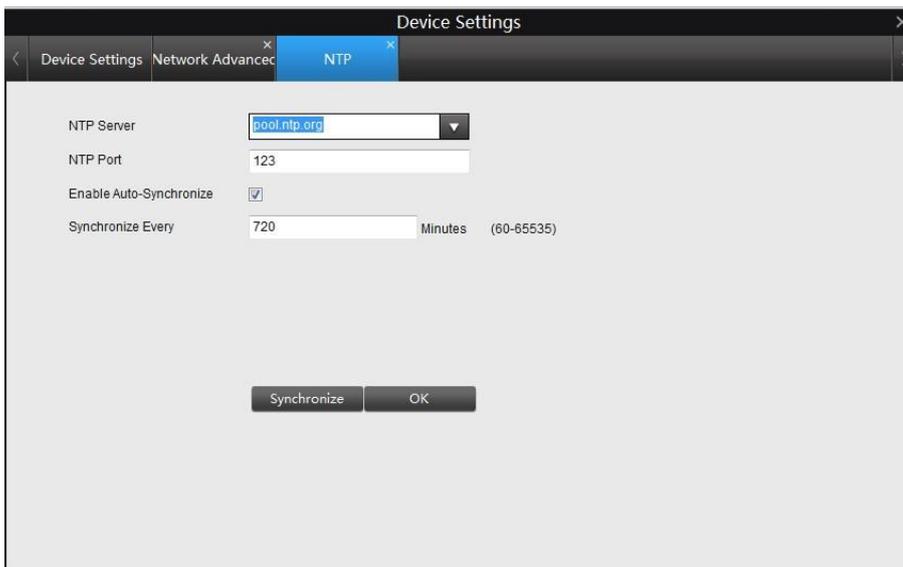
Email Settings: Configure the receiver to work with an email account of your choice.

Port Setting: There are three different port settings:

- **Media Port:** This is the port that the Receiver will use to send information through.
- **HTTP Port:** This is the port through which you will be able to log into the Receiver from a web browsers.
- **RTSP Port:** “Real Time Streaming Protocol”, you may use this port to send the streaming file to Real player, the default RTSP port is 554.

UID: The Receiver Unique Identifier code.

NPT



NTP Setup

NTP Server: The server you intend to use to access the current date and time. The default is pool.ntp.org.

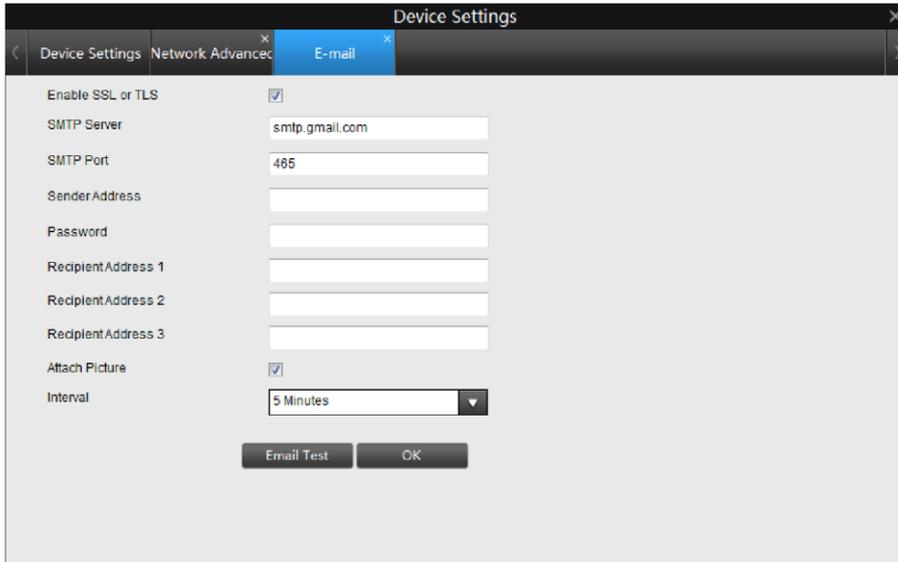
NTP Port: The port that the NTP server uses. The default for pool.ntp.org is 123.

Enable Auto-Synchronize: Select the checkbox to enable Auto-Sync function.

Synchronize Every: Set the Sync interval time.

Note: If you have enabled NTP - set this to the time zone of your location.

E-mail



The screenshot shows the 'E-mail' configuration screen within the 'Device Settings' application. The screen has a dark header with 'Device Settings' and 'E-mail' tabs. The main area contains several settings:

- Enable SSL or TLS:** A checkbox that is checked.
- SMTP Server:** A text input field containing 'smtp.gmail.com'.
- SMTP Port:** A text input field containing '465'.
- Sender Address:** An empty text input field.
- Password:** An empty password input field.
- Recipient Address 1:** An empty text input field.
- Recipient Address 2:** An empty text input field.
- Recipient Address 3:** An empty text input field.
- Attach Picture:** A checkbox that is checked.
- Interval:** A dropdown menu set to '5 Minutes'.

At the bottom of the screen, there are two buttons: 'Email Test' and 'OK'.

If you want the Receiver to send email alerts as alarm events are detected, you need to configure an outgoing email server for the Receiver and choose an email address for it. We recommend creating an dedicated Gmail account specifically for the Receiver.

Note! If you experience problems with email notifications set the Gmail security level to “Allow less secure apps” at <https://myaccount.google.com/lesssecureapps>

SMTP Server: You can choose a smtp-server of your choice. We recommend using Gmail (smtp.gmail.com).

SMTP Port: The SMTP port used by the email provider of your choice. The default for Gmail is 465.

Sender Address: The address you are sending the email from. This will be the username you have set up for the email server you are using, For example: “youraddress@gmail.com” or similar.

Password: The password for the outgoing email account.

Recipient Address: The email address you want the receiver to send emails to. Three (3) email addresses at most can get the notification when there is motion detection alert.

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

Attach Picture: Check this box to send a picture attachment via email.

Email test: To check if you have set up the email alerts properly, click the Test button. After a short delay, you will receive an e-mail in your inbox (Recipient Address) informing you that email alerts from the receiver has been set up. If the test is unsuccessful, please check your sender’s address/password and recipient’s address(es) and try again. Please also make sure to set the Gmail security level to “Allow less secure apps”.



Here you will find the network information of the camera that you are viewing.
For more details, please refer to Device Setting -> Network -> General.

Network Status	
IP Address	192.168.1.100
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Preferred DNS	202.96.134.133
Alternate DNS	202.96.128.68

Alarm: Motion

11



Motion	
Enable	<input checked="" type="checkbox"/>
Sensitivity	Setup
Schedule	Setup
Action	Setup
Motion Detect	Setup

OK

Enable: Turn on motion detection on a specific channel. Each channel can be configured independently.

Sensitivity: If the motion detection sensitivity is too high, then the Camera will record too frequently or continuously - any benefit of motion detection will be lost. If the motion detection sensitivity is too low, then the Camera will not record when it should and may not record anything at all.

- Here you may set the sensitivity for different times, for example, night time sensitivity is higher and day time sensitivity is lower for frequent movement on the daytime.

Schedule: Set the motion detection schedule time, one box is equal to 1 hour.

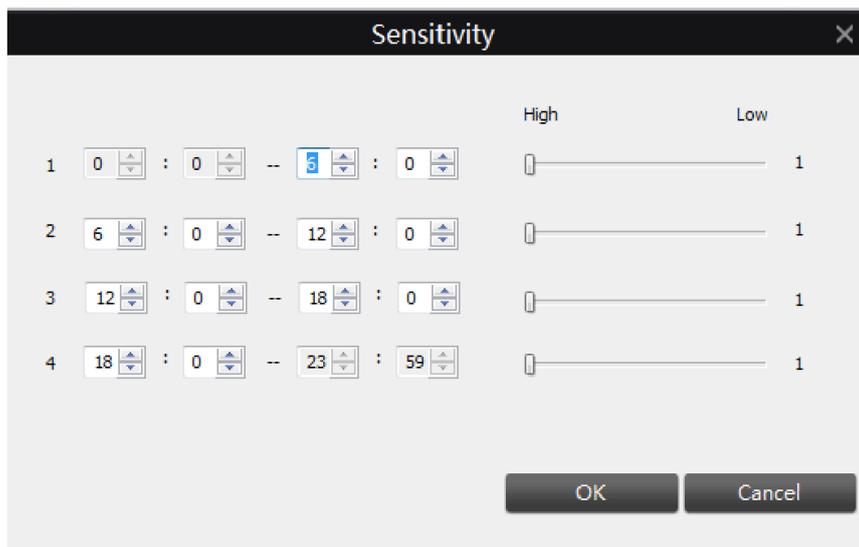
Action: Define what will happen when the camera you've selected detects motion. You can enable audio warning on receiver, activate push notifications and send e-mail when motion is detected.

- Note: If you've used the Copy-To feature to copy from one camera to another, remember that you still need to set the Action for each channel independently - that information isn't copied.

Motion Detect Setup

- **Full Screen:** Set the motion detection area, drag the box to un-choose the area. For example, you can use the grid to cover your diesel tank, so your diesel tank will be set as the motion detection area.
- **Clear Area:** Clear Area means no area for motion detection.

Sensitivity



The Sensitivity setting is controlled by a slider, allowing you to set a value between 0 and 50. The lower the number, the more sensitive the motion detection will be. 1 is the highest sensitivity. There are four time periods where you can define different motion sensitivity values. You may change each period's start and end time to best match the changing lighting conditions in your area. Values between 5 - 10 will give good results in the daytime.

Note: At night, you may get several false triggers unless you raise the sensitivity setting, perhaps as high as 25 - 30. This is because when cameras use active infrared night vision, they dramatically increase the gain controls to the image sensor. This creates a level of "noise" in the camera's images, which are interpreted by the Camera as motion.

By default, the day is divided into four periods:

00:00 (Midnight) - 06:00 (6:00 AM)

06:00 (6:00 AM) - 12:00 (Lunch)

12:00 (Lunch) - 18:00 (6:00 PM)

18:00 (6:00 PM) - 00:00 (Midnight)

You might need to shift the beginning and end times to best suit the lighting conditions in your area.

There is no requirement for all four time periods to have different sensitivity levels but it is suggested as it usually gives the best performance. To find the best sensitivity values for different times of day/ night, it's best to test the system during different time periods.

False Triggers

Setting the motion detection at high sensitivity levels (4 or lower) increases the frequency of false alarms. On the other hand, low sensitivity levels (20 or higher) increase the risk that a significant motion event (such as a thief) will not trigger the motion detection to record.

Check the Motion Detection settings both during the day and night. In low-light conditions (or when your cameras are using infrared night vision) the Camera may be more or less sensitive to motion depending on the circumstances.

Weather

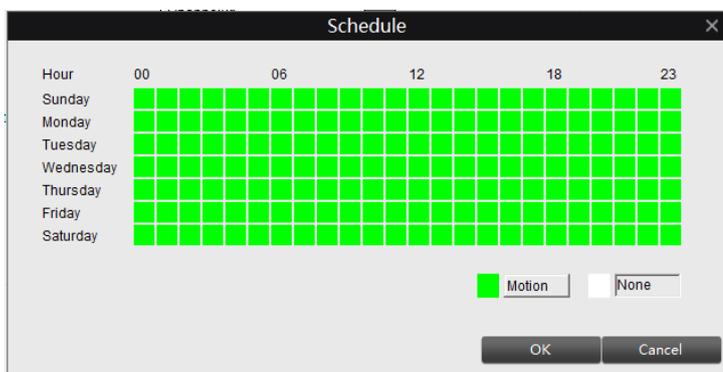
The weather conditions will affect your motion detection. Dramatic weather such as heavy rain, strong winds, lightning and so on, may trigger the motion detection with increased frequency. Other weather conditions like fog, mist and other obscuring kinds of weather might mask or hide something moving to the point that the Camera fails to detect them. Here are a few steps you can take to minimize false triggers

- Try adjusting the Image Settings to fine-tune the brightness and contrast to get a more stable image.
- Limit the motion sensitive area to only the areas in view that a target could be. Turning off the motion sensitivity to any area a target cannot move in front of will help reduce false triggers.

Schedule

Motion Detection Schedule

You can set the schedule time 7 days, 24 hours a week, when green box is marked, it will trigger an alarm when motion is detected.



Full Screen

The outlined boxes mark the area that is sensitive to motion. The area without the white outlines is not sensitive to motion. Click mouse to select and click again to de-select.

Use the mouse to move the cursor around the screen. By pressing select an area in the grid, you may toggle motion detection ON or OFF in that location. Areas marked by white boxes will be sensitive to motion, those not marked will not be. Click and drag to select the area you want to select or de-select.

Clear Area

Click to clear up the motion Area.

System: General

12



Device Settings

Device Settings System General

General

Video Standard PAL

Time Zone (GMT+0:00) Dublin,Edinburgh,L

Date Format DD/MM/YYYY

System Time 2015/ 5/ 4

4 9 14

Synchronize Local Time

DST Settings

Enable Password

Device Name NVR

OK

Video Standard: Choose between NTSC (USA, Canada, Mexico, Japan, Korea and some other regions) or PAL (default) (UK, Europe, Australia and some other areas). If this is set incorrectly, images from your cameras may be distorted, flickering or black and white.

Time Zone: Choose the time zone in your location. Note! It is important to select the right time zone if you are using NTP (Network Time Protocol).

Date Format: Choose the format of the date (DD/MM/YYYY or MM/DD/YYYY etc.).

System Time: This can be edited manually, or set to update automatically by using NTP.

Synchronize Local time: When pressed, the camera time will sync with local PC time.

DST Setting: As the standards for daylight savings differ from country to country, you might need to manually tell the Receiver exactly when it starts and ends in your area. First, turn DST on. We suggest setting the **Daylight-Saving Time Mode to Date**, and manually entering the dates and times that daylight savings time applies to and from, in your area.

Note: Some NTP servers are NOT fully compatible with DST. This may cause your system to double count adding one or removing one more hour than they should, or cancel each other out. You may need to intentionally change your time zone to compensate, or simply not use NTP and DST simultaneously.

Enable Password: When enabled, the system will require a password to access, even for local users.

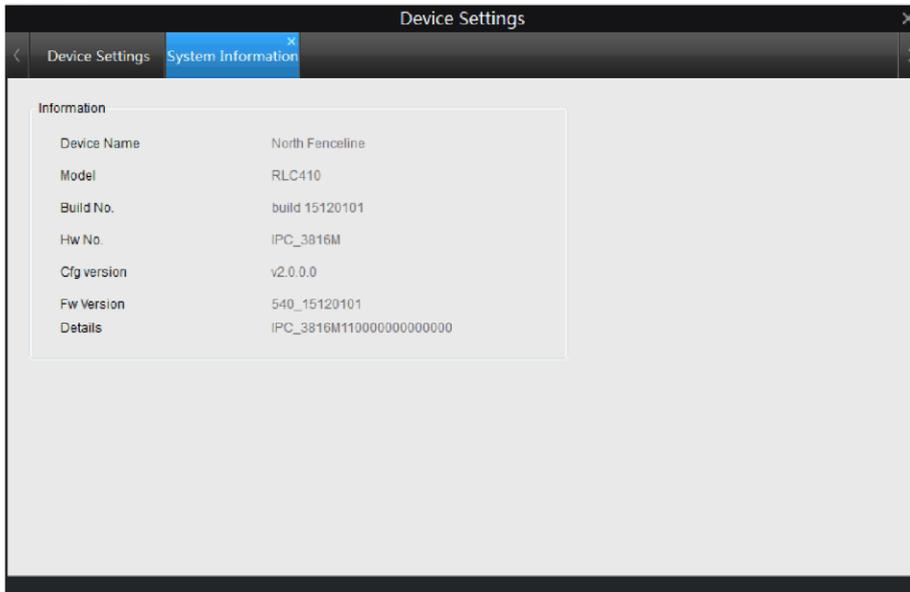
Device Name: Differentiates your Camera from other devices. If you don't have any other Camera or similar device, then you can leave this blank. If you've got multiple Cameras running on the same network, then it's a good idea to give each a unique ID.

System: Information

13

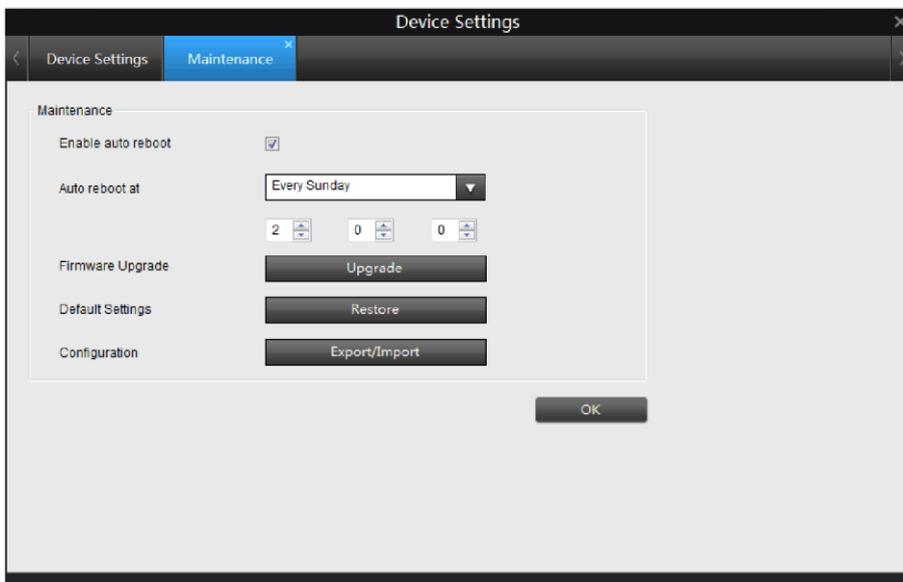


The information is for use by Technical Support, if you require assistance. The various model and build numbers help us track down any known issues, or catalogue new issues.



System: Maintenance

14



For maintenance of the receiver, it is suggested that it should be rebooted periodically. It can become unstable if left on for an extremely long time. It is suggested that the receiver be rebooted at least once per week. You may set the receiver up to reboot itself.

Enable auto reboot: Check the box to automatically restart the receiver at a certain time.

Auto reboot at: Choose the exact time when you would like the receiver to reboot.

Firmware Upgrade: Used for upgrading firmware.

Default Settings: Loads the Factory default settings.

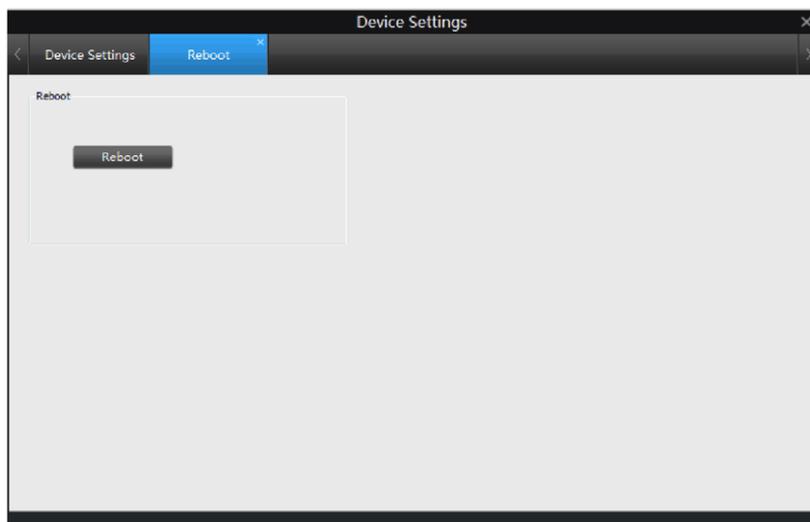
Configuration: Used for importing and exporting files.

System: Reboot

15



If you want to shut down or reboot the system, click the Reboot button

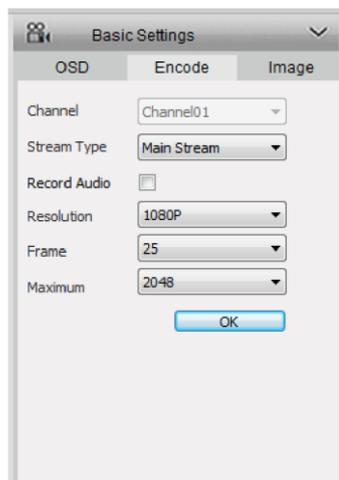
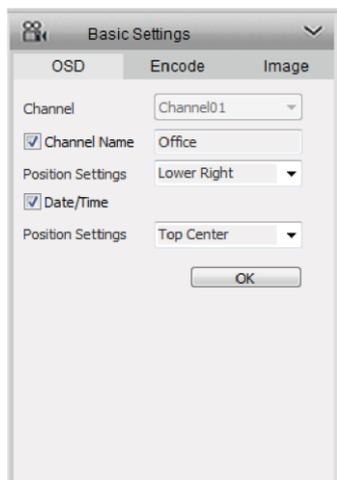


Basic Settings

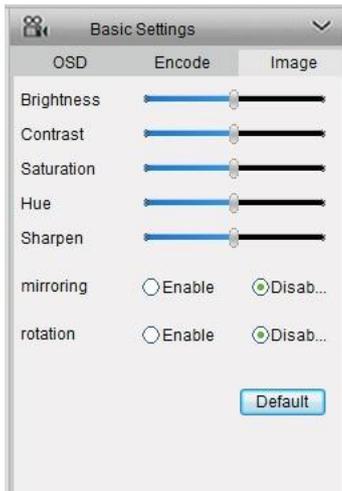
16

Basic Settings - OSD - Please refer to Device Setting -> Display -> Camera

Basic Settings - Encode - Please refer to Recording -> Encode



Basic Setting Image:



Brightness: Changes how light the image appearance will be.

Contrast: Increases the difference between the blackest black and the whitest white in the image.

Saturation: Alters how much color is displayed in the image. The higher the saturation, the more bright and vivid colors will appear to be.

Hue: Changes the color mix of the image (this can have very dramatic results).

Sharpen: Sharpen image to increase the Signal Noise Ratio.

Mirroring: Enable to Change the orientation of the image to be horizontally reversed.

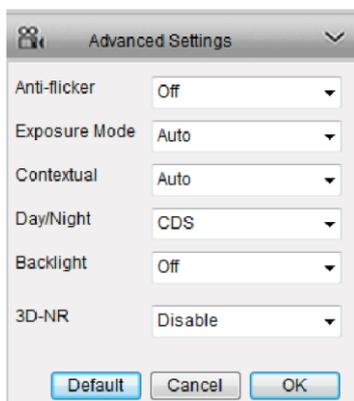
Rotation: Enable to turn the image up side down.

Note: Your image settings will affect your recordings.

Advanced Settings

17

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 Europe, set this to 50Hz.

Exposure: Select the exposure level of the camera based on pre-defined conditions. Select Manual to adjust shutter speed and gain value of the camera manually.

Day/Night: Set the camera's colour mode during different times of the day and night – AGC (Auto set by image sensor, Colour (Always in Day mode), Black & White (Always in Night mode) or CDS (Auto set by light sensor).

Backlight: Optimise 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 there is no negative effect.

3D-NR: 3D-Noise Ratio: if enabled may decrease the noise of the image.