

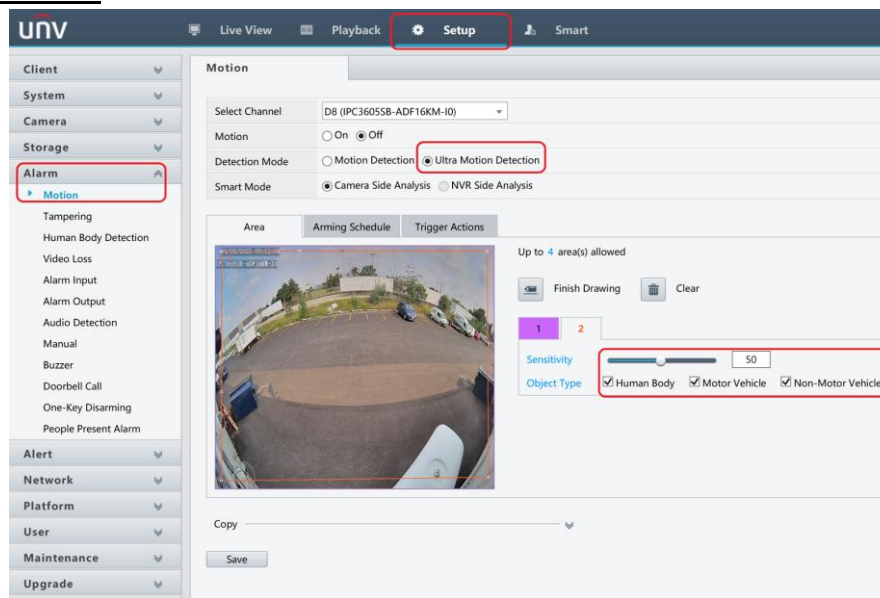
CCTV System Optimization - Quick Guide - Advanced optimization

V.0

This document provides tips and best practices for optimising your CCTV system to its best performance and maximum resource utilisation.

1. Alarm/ event Optimization: Activate Ultra motion detection or smart VCA features (cross line/Intrusion) on cameras instead of Motion detection

- Supported cameras: Most of the Active deterrence, LE-G, SE and SB series cameras support UMD. VCA detection is a feature supported in most of the cameras from essential series.
- Supported NVRs: Mostly all the currently available NVRs in the portfolio are supported.
- Configuration*:

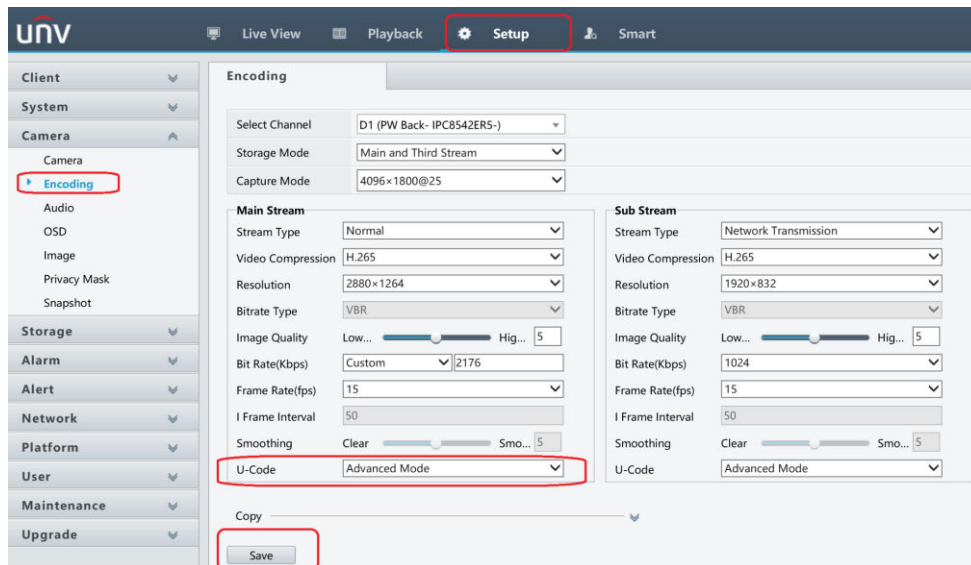


- Advantages: Reduces false alarms significantly and provides reliable alerts.

2. Bandwidth Optimization: When using UNV cameras with UNV NVR utilise U-code which reduces your bandwidth requirements up to a quarter of what is actually needed.

- Configuration*:

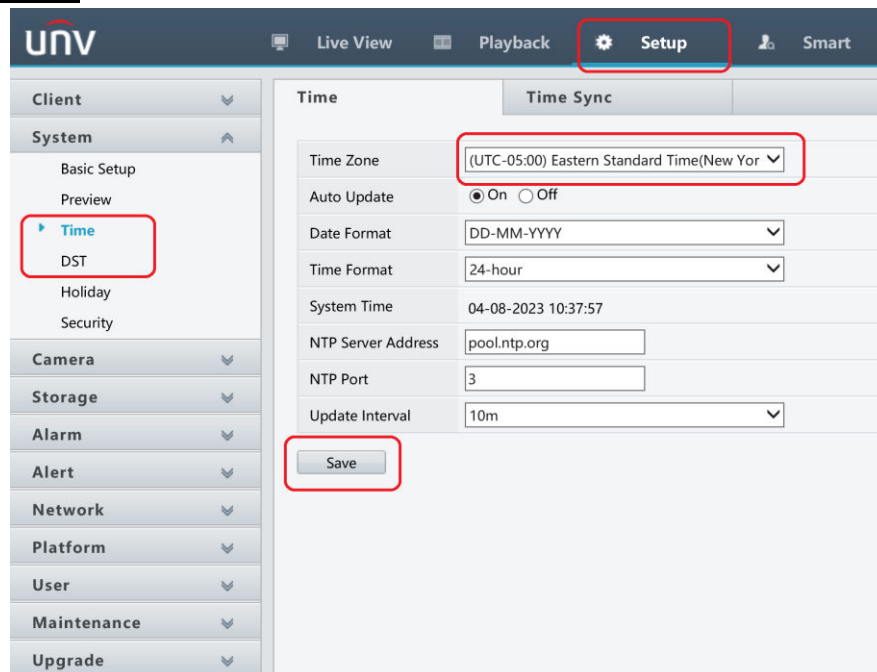
*- choose parameters according to client requirements



- **Advantages:** Bandwidth optimization provides longer storage on the same HDD as well as better streaming on mobile/ workstation devices.

3. Date and Time: Setting up the date and time with Daylight saving helps to navigate through the playback without challenges year long.

- **Configuration*:**



- **Advantages:** Time stamp helps to navigate through the system in case of an event.

4. xxxxxx: xxxxxx

- **xxxxx*:**

1. Basic Settings

- Set a strong password
- Register email address (helpful for password recovery)
- Set Date and Time (including Time zone and DST)

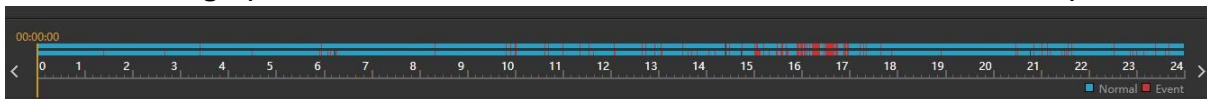
*- choose parameters according to client requirements

- Set IP address (DHCP or Static) according to customer preferences
- Plug-in cameras to POE ports and cameras will be added automatically via Plug n play
- Auto search cameras using tab and batch add if the cameras are on the network

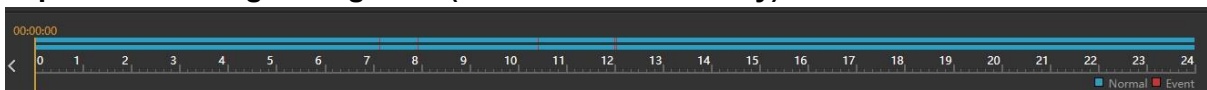
Highly recommended for bandwidth optimization and reducing false alarms

Advantages: Massive reduction in false alarms. comparison playback clip below:

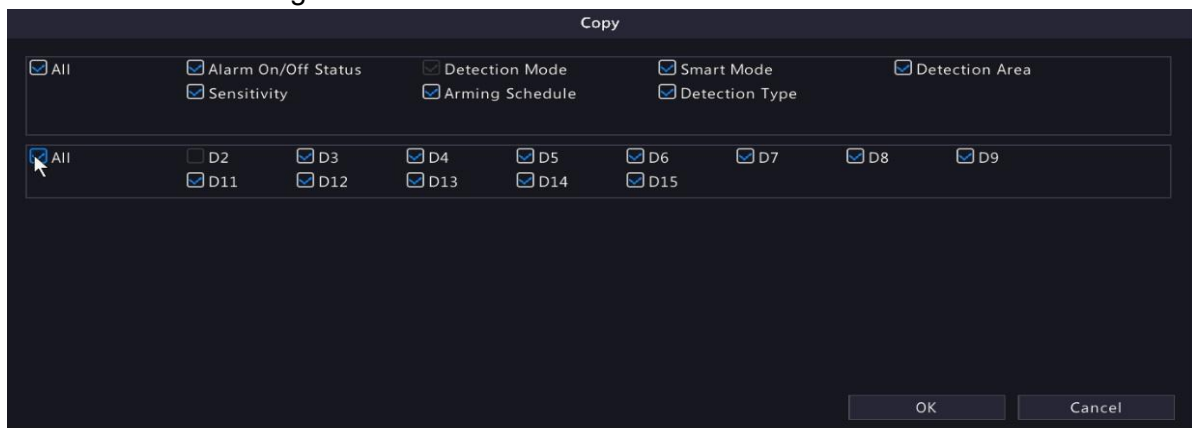
Default settings (alarms counted for shadows, wind, movement of trees, etc)



Optimised settings using UMD (Human or vehicle only)



- **Ultramotion detection (UMD)**
 - Supported devices: Most of the SR3-G, SB-I0, SB-KMC, SE-I0 series cameras. Update the firmware to the latest version in case UMD is not found in the settings.
 - Step-1: Settings> Alarms> Motion Detection> Turn on UMD> Draw detection area> Sensitivity 60% (can be changed as per site conditions)> Save
 - Step-2: Copy settings to all cameras as shown below and save.
 - Those cameras do not support UMD remains on Motion detection by default and can be configured with SIP as shown below.



- **Smart Intrusion Prevention/ SIP (alternative solution for UMD)**

*- choose parameters according to client requirements

- Configuration: Settings> Smart> Turn on SIP feature> Set detection area> Sensitivity 60% (can be changed as per site conditions)> Save
 - Copy settings to applicable cameras and save.
- **U-code (bandwidth optimization)**
- U-Code optimises the total bandwidth requirement upto 75% which helps to increase the storage and better streaming performance through applications.
 - Step-1: Settings> Camera> Encoding> Smart encoding> basic mode> save
 - Step-2: Copy U-code option to all available cameras and save

Encoding Format	H.264	H.265	U-Code Basic mode	U-Code Advanced Mode
1080P Code Stream	4Mbps	2Mbps	1.5Mbps	1Mbps
1080P Code Stream	42.2G/Day	21.1G/Day	15.75G/Day	10.5G/Day