
# EL-NVR-8CH

## Reference Guide

10024106 REV-A_EL-NVR-8CH

# CONTENTS

# ABOUT THIS DOCUMENT

This document includes instructions for basic operation of the EL-NVR-8CH Network Video Recorder.

# ELECTROMAGNETIC COMPATIBILITY (EMC)

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to attempt correcting the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a different circuit to the receiver
- Consult your dealer or an experienced radio/TV technician for assistance
- Shielded (STP) network cables must be used with this unit to ensure compliance with EMC standards

**Note:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.


## Features

- Standalone NVR
- Supports 4K, 5-megapixel, and 1080p 60 FPS H.264 IP cameras
- Up to 48 Mbps incoming network throughput
- Full HD 4K HDMI and 1080p VGA output
- Compatible with iOS and Android devices via the ELAN mobile app

## Caution

- Do not drop or strike the equipment
- Do not install the equipment near open flames or heat sources
- Do not expose this unit to rain, moisture, smoke or dusty environments
- Do not cover the opening of the unit with cloth or plastic or install this unit in a poorly ventilated place

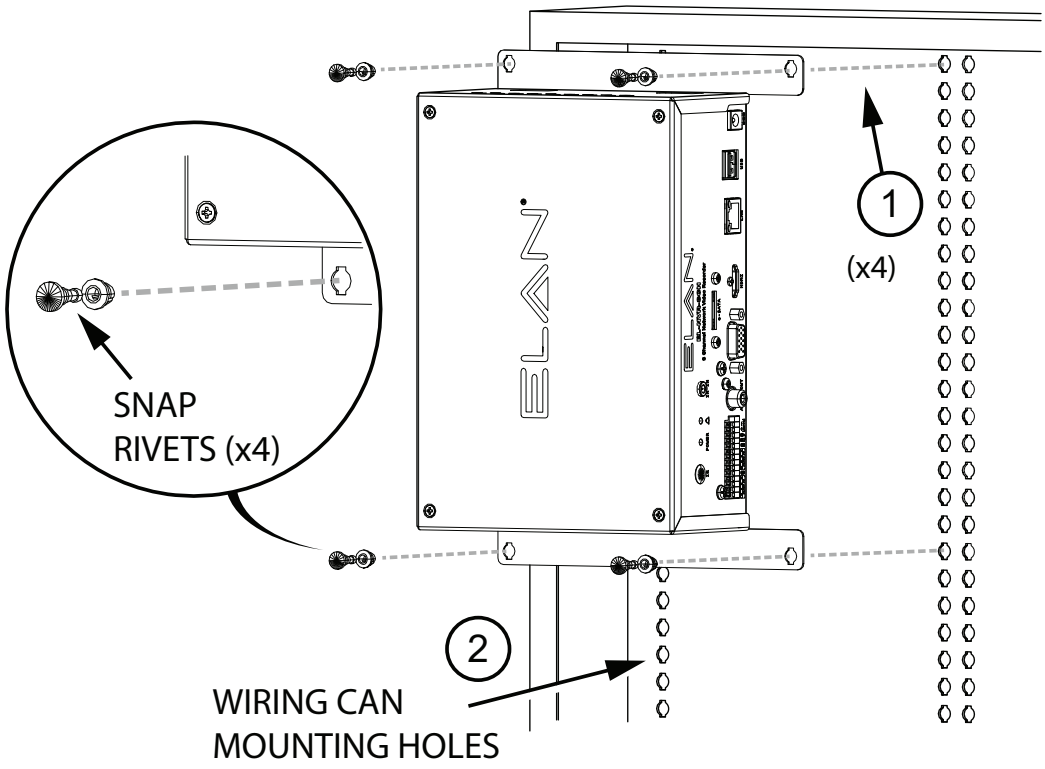
  **Note:** Allow 10 cm between this unit and its surroundings.
- Do not continue to operate the unit under abnormal conditions such as detection of smoke, strange smell, or malfunctioning screen while power is turned on
- Do not touch the power connection with wet hands
- Do not damage the power cord or leave it under pressure
- To avoid unnecessary magnetic interference, do not operate this unit near magnets,speaker systems, etc.
- All connection cables must be grounded properly

**CAUTION**

Risk of explosion if battery is replaced with an incorrect type.
Dispose of batteries according to the instructions.

# INSTALLING THE NVR IN THE STRUCTURED WIRING CAN

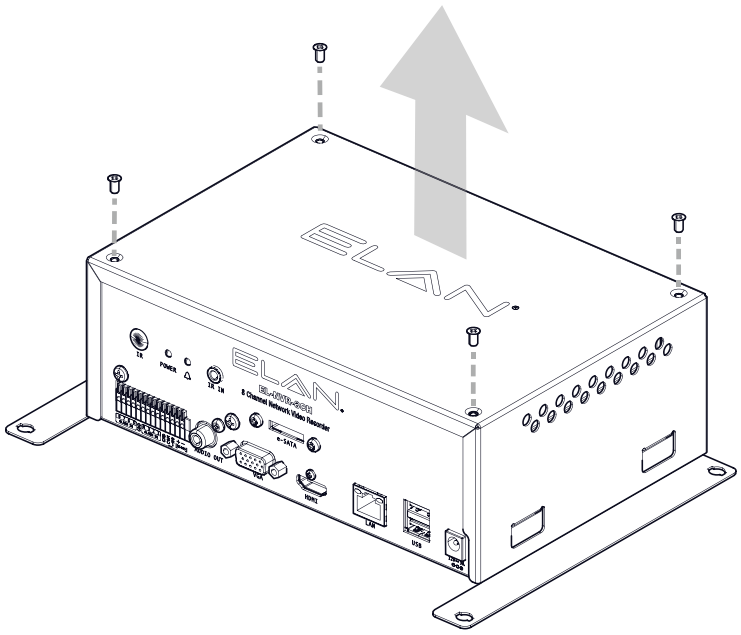
1. Align the bracket holes (x4) with the holes in the wiring can.
2. Insert the snap rivets (x4) through each bracket hole (x4) and then into the wiring can holes.
3. Push on the head of each snap rivet to secure it in the wiring can hole.



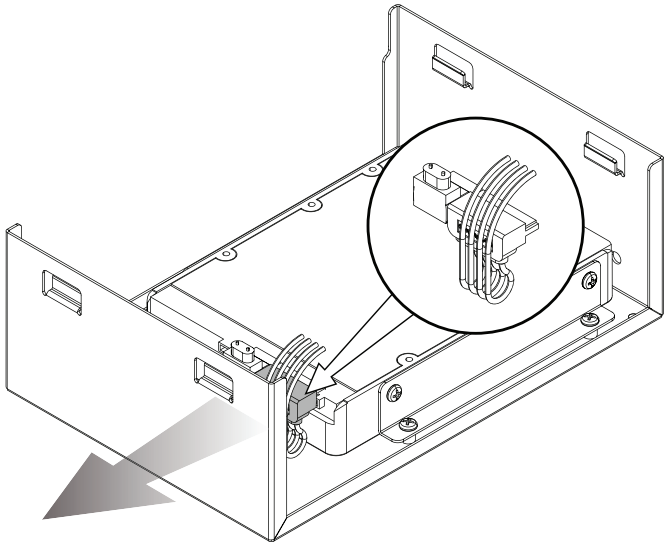
# HARD DRIVE – REMOVAL AND INSTALLATION INSTRUCTIONS

## Removing the Hard Drive

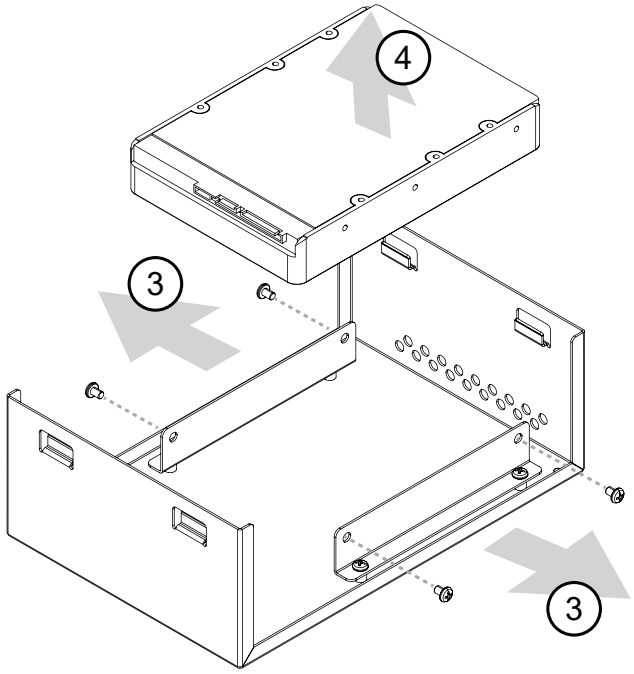
1. Remove screws (x4) located in top corners of upper casing, carefully lifting it upwards.
   **Note:** The connector cable is attached to the hard drive located in the upper casing.



2. Disconnect the cable connector from the hard drive.



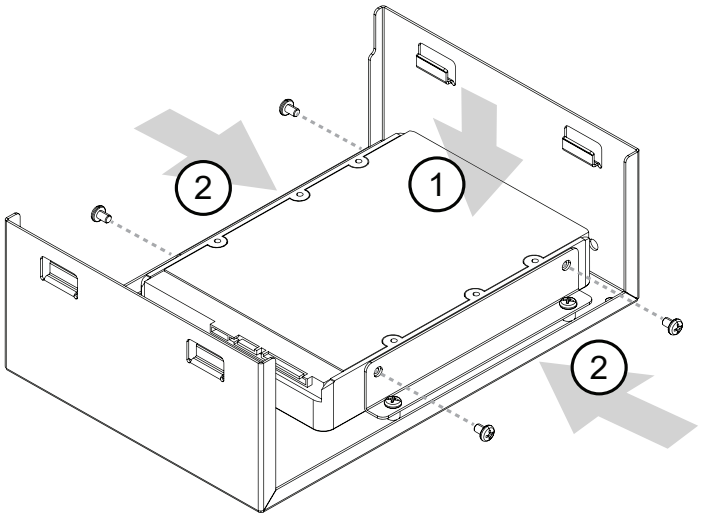
3. Remove the screws (x4) from the brackets located on both sides of the hard drive.
4. Remove hard drive.



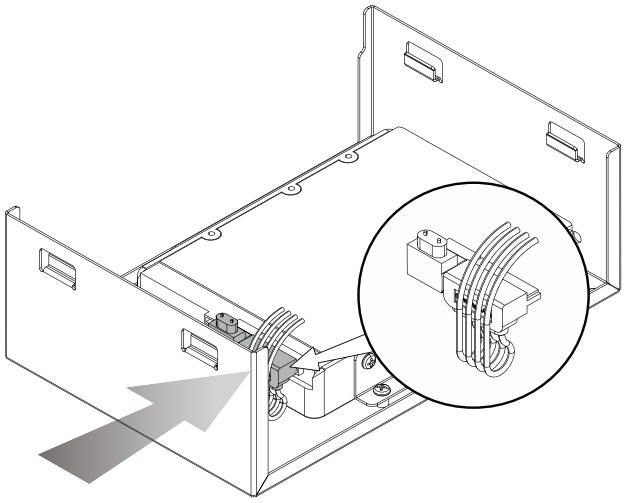

## Installing the Hard Drive

**Note:** Only Western Digital Purple Surveillance Drives are supported, up to 8TB.

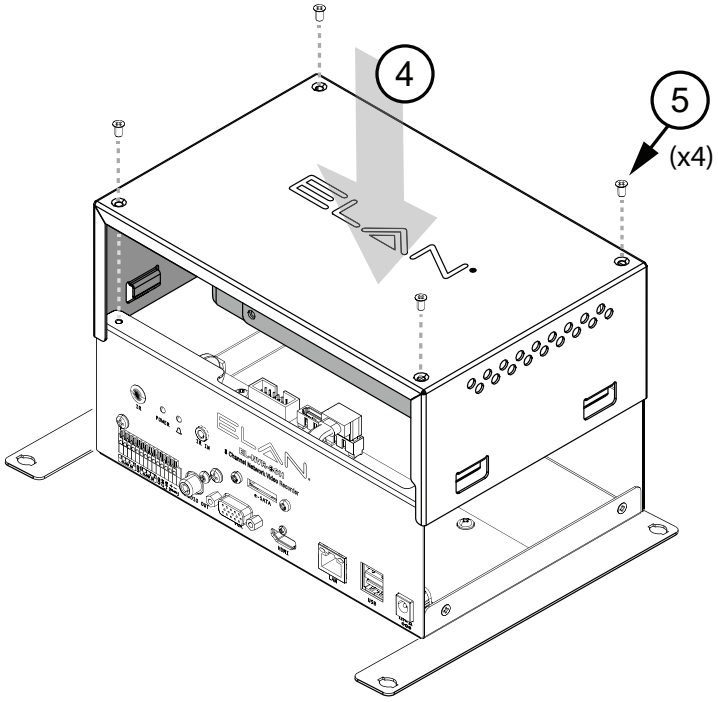
1. Insert the hard drive between the brackets, aligning the hard drive screw holes (x4) with the holes in the brackets.
2. Insert and tighten screws (x4).



3. Reinsert SATA and power cable into hard drive.



4. Slide cover over NVR.
5. Insert and tighten the screws (x4).

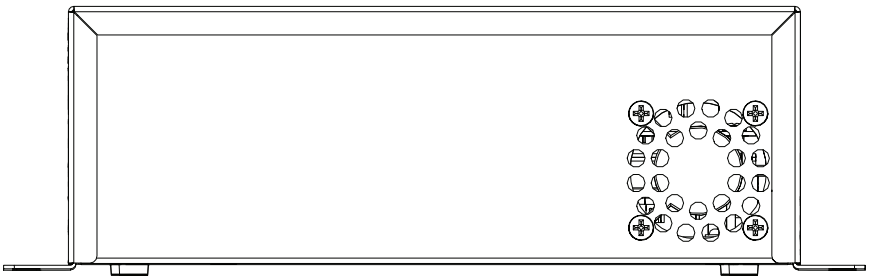



**Note:** The new hard drive must be formatted using the NVR before it can be recorded to. Please refer to the **NVR System > Storage** section on Page 17.

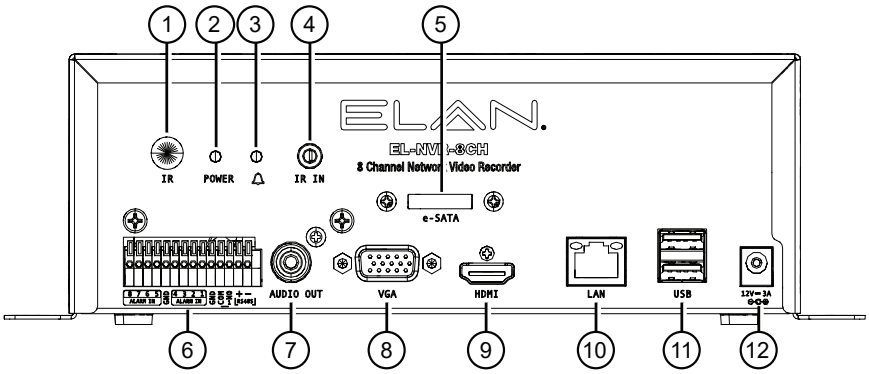
# PRODUCT OVERVIEW

## EL-NVR-8CH

*Rear View*



*Front View*




1. IR
2. Power Indicator
3. ALARM Indicator
4. IR In
5. e-SATA
6. RJ-45 Gigabit connector
7. Audio Out
8. VGA output
9. HDMI output
10. LAN
11. USB / Keyboard
12. Power socket (DC 12V-3A)

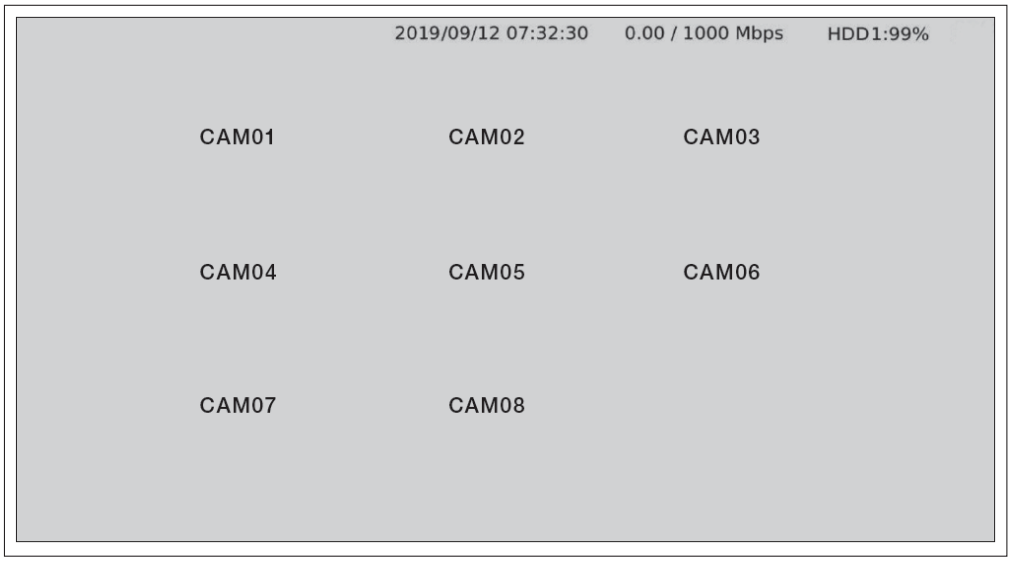
# BEFORE USING THE NVR

## Important!

- It is recommended to use the ELAN Controller for setup of ELAN NVR and Cameras
- If installing ELAN Cameras and/or ELAN NVR with an ELAN Controller, please refer to the “ELAN Surveillance” Integration Note for setup and software configuration
- ELAN Integration Notes are served through the ELAN tools and on elanhomesystems.com/dealer-resources

If you are configuring with an ELAN controller, it is not recommended to make changes via the NVR Web GUI. The ELAN software controls the vast majority of these functions. The software configuration information in this document can be used to extend device control parameters for use within an ELAN controller environment, or for operating this hardware independent of an ELAN controller.

You will see the following screen through the HDMI or VGA connection when the NVR is powered ON:




The information shown on the top of the screen is described as follows:

**0.00/1000 (100) Mbps:**

The left side of the slash is the combined transmission rate of all channels, and the right side is the your network speed.

**HDD (1):(2)%:**

1. Shows the current number of the hard drive being used for recording
2. The storage capacity used as a percent (%)

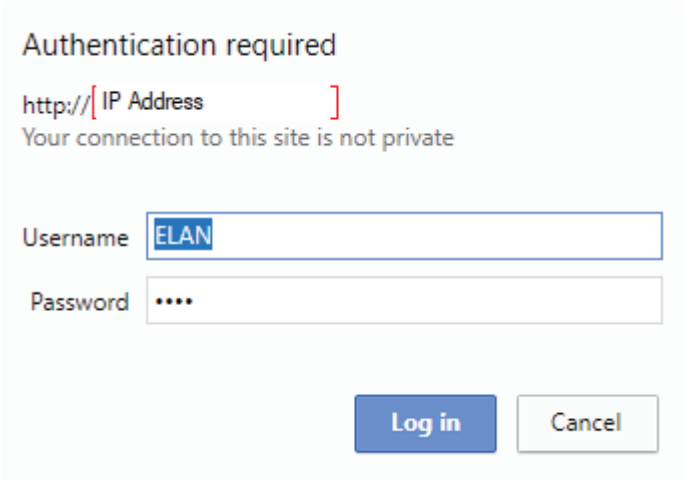
# LOCATING NVR IP ADDRESS

ELAN NVRs are set to DHCP out of the box. Connect your ELAN NVR to the network, using your preferred network scanning app, and scan for the NVR. The NVR's name is EL-NVR-8CH.

**Integrators TIP:** Look for an ELAN MAC address with the following pattern "F8-57-2E-XX-XX-XX".
**Note:** ELAN Discovery will also locate the NVR automatically.

Once the IP address is determined, type the IP address into your browsers' address bar and 'press' **Enter**.

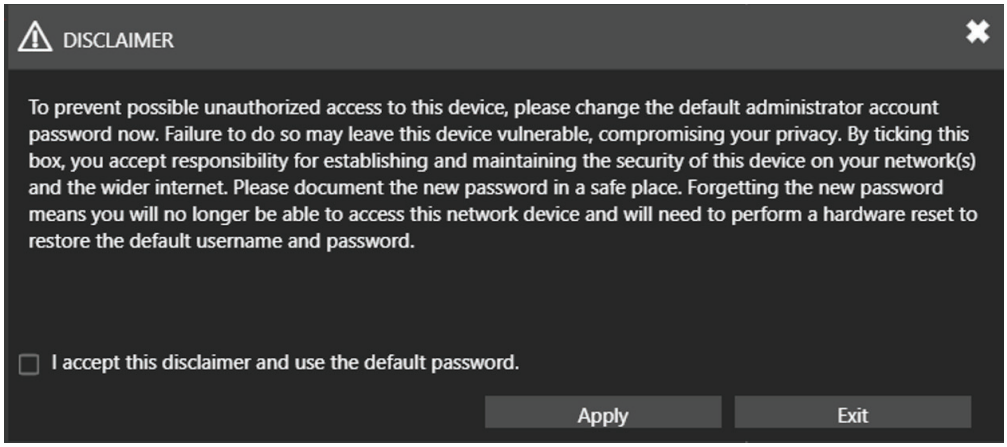
Authentication pop-up will appear requesting username and password to log in. For logging in the first time use the default username and password.




**Default Username: ELAN  Default Password: 3526**

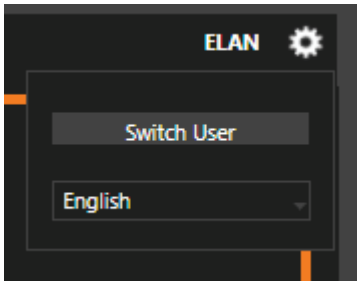
**Important:** It's recommended you change the default password. See section on how to change password.

Password Change Pop–Up Box



# LANGUAGE SETUP/SWITCH USERS

When setting the NVR up for the first time, 'click' on the **gear icon** in the upper–right corner of the user interface. A dialog box with two options will appear, switch user and language.

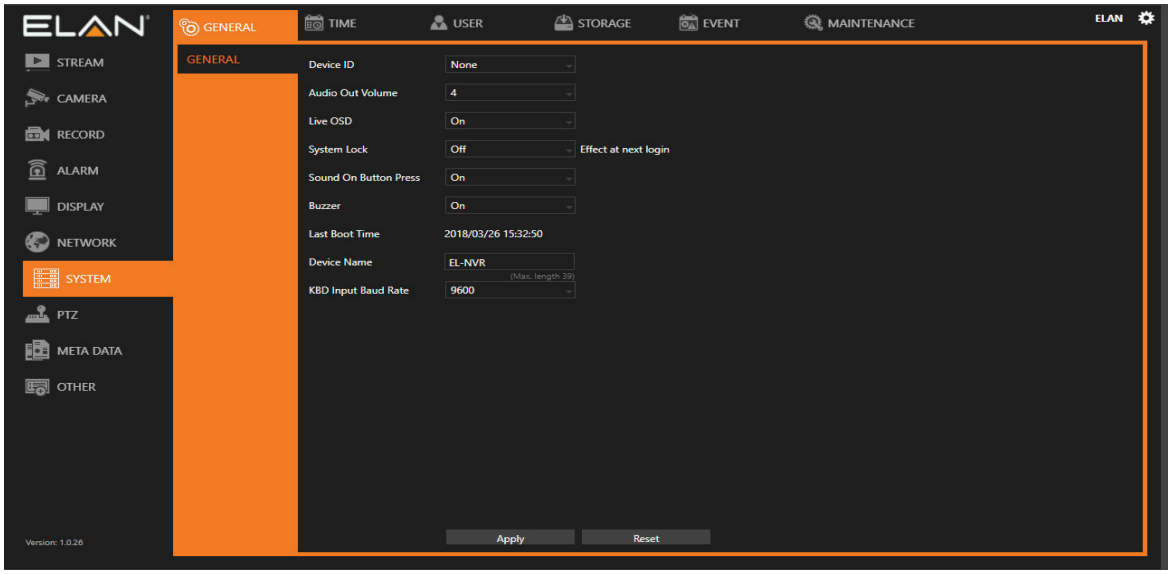



To change the language of the NVR, select the drop–down menu and choose your preferred language.

# NVR SYSTEM

## NVR System > General

To enter NVR settings, 'click' **SYSTEM** in the left pane where you are allowed to adjust the NVR's configuration.




**Device ID:**
Assign an ID for the NVR to be controlled by the remote controller.

**Audio Out Volume:**
Adjust the volume of the NVR.

**Live OSD:**
On, Off, or no camera name.

**System Lock:**
Switch on/off the system lock.

**Sound On Button Press:**
Switch On/Off the sound when 'pressing' remote control buttons.

**Buzzer:**
Switch on/off the sound when an alarm is triggered.

**Last Boot Time:**
Shows the last time the system is rebooted.

**Device Name:**
Name of the NVR

**KBD Input Baud Rate:**
Adjust Baud Rate, default is 9600.

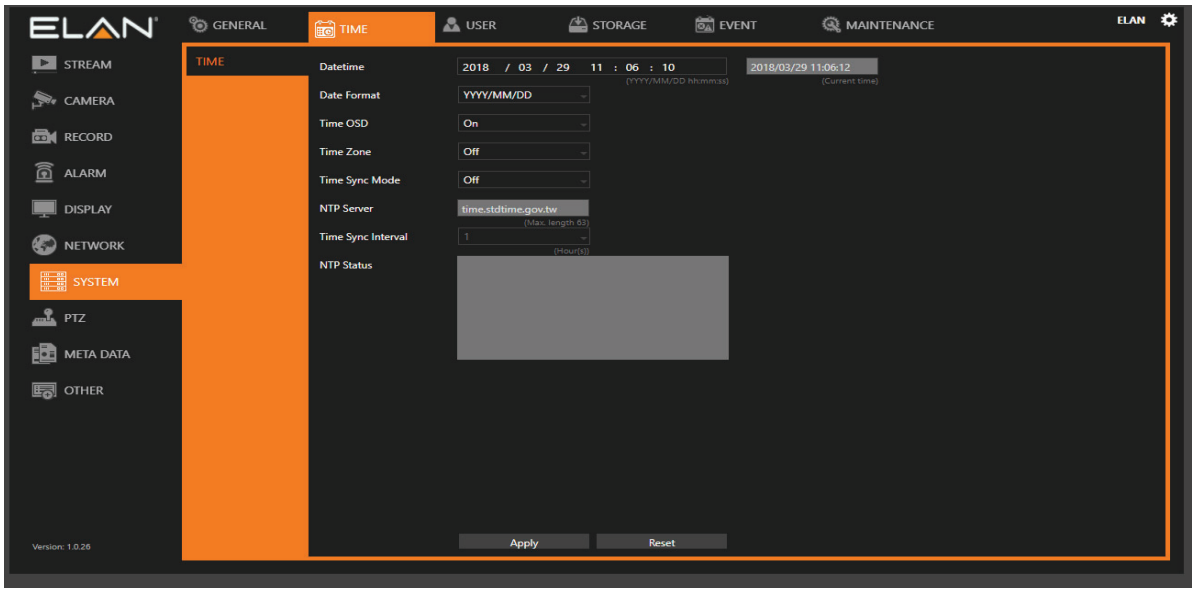
**Important:** 'Click' **Apply** to save settings.

# NVR SYSTEM (CONT.)

## NVR System > Time

To enter NVR settings, 'click' **SYSTEM** in the left pane where you are allowed to adjust the NVR's configuration.

**Note:** Do not modify these setting when the NVR is connected to an ELAN controller.




**Date/Time:**
Set the date/time of the NVR.
ELAN Controller will sync time and date of the NVR automatically.

**Date Format:**
Modify the date display format.

**Time OSD:**
Switch on/off the time to be displayed on the screen.

**Time Zone:**
Change the time zone of the location where the NVR is installed.

**Time Sync Mode:**
Choose how you would like the time to be synced.

**NTP Server:**
Enter the NTP server you want to use.

**Time Sync Interval:**
Choose the interval for the time to be synced.

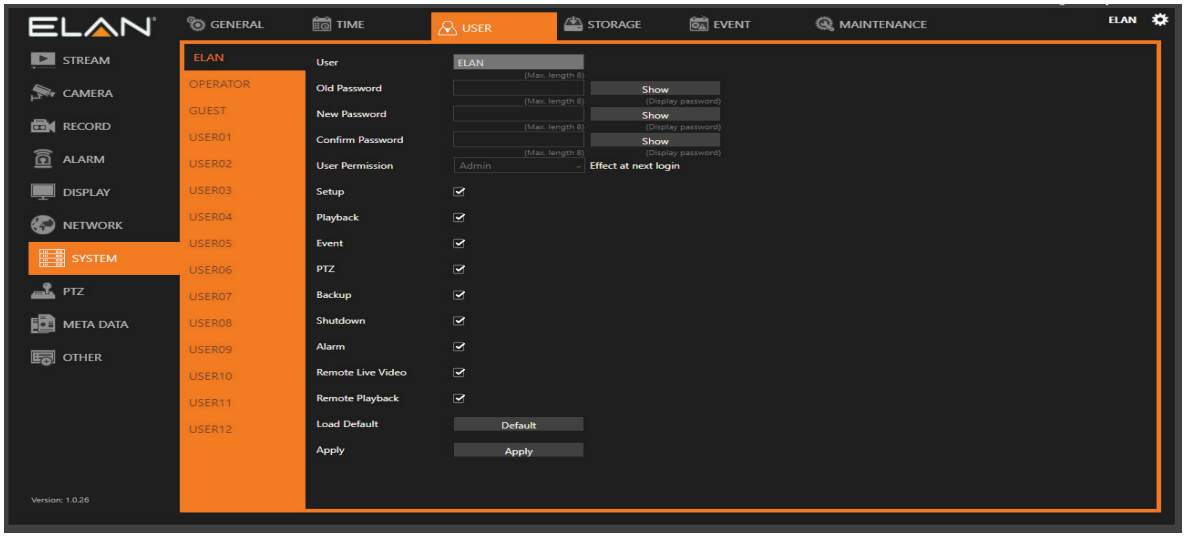
**NTP Status:**
The status of connection to selected NTP server will appear here.

**Important:** 'Click' **Apply** to save settings.

# NVR SYSTEM (CONT.)

## NVR System > User

To enter NVR settings, 'click' **SYSTEM** in the left pane. This allows you to adjust the NVR's configuration.




The NVR supports up to 15 sets of individual user settings (including default user administrator, operator, and guest), allowing you to assign different access privileges.

**User:**
Enter the name of the user (applicable only to User01–12).

**Old Password, New Password, and Confirm Password:**
If you would like to change the password, enter your previous password and enter the new password and confirm the password. 'Press' **Show** to reveal the password. The default passwords for administrator, operator, and guest are 3526, 2222, and 3333, respectively.

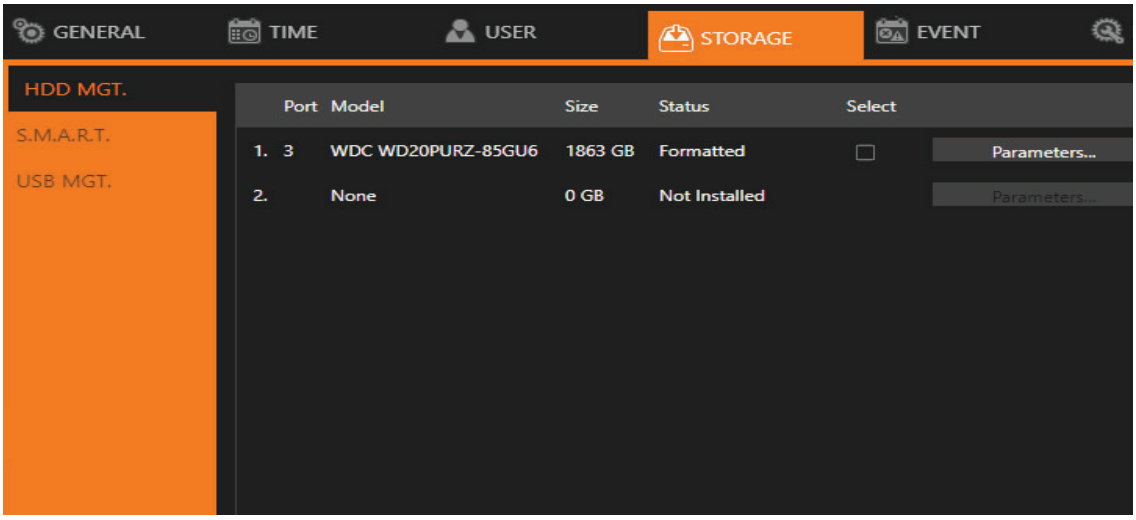
**User Permission:**
Set the access privileges of the user to administrator, operator, or guest.

**Load Default:**
Restore to the default settings.

# NVR SYSTEM (CONT.)

## NVR System > Storage

'Clicking' **STORAGE** in the left pane allows you to adjust **HDD MGT.**, **S.M.A.R.T.**, and **USB MGT.**

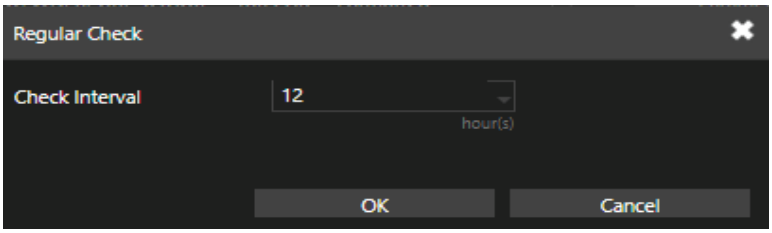



**HDD Management:**

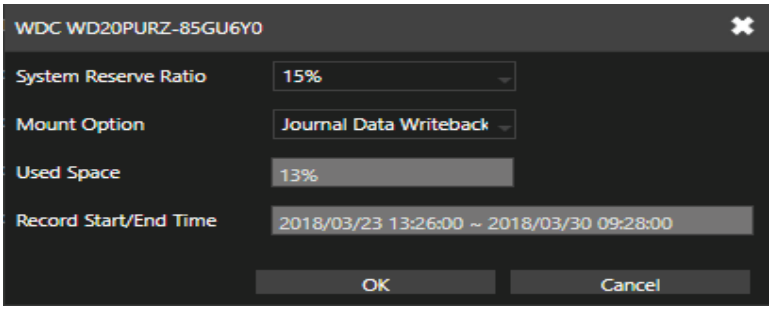
In **HDD MGT.**, you are allowed to format, defrag, check malfunctioned blocks, or run an overall system check on any of the devices. Select a desired device and 'click' **Format**, **File System Defrag**, **Bad Block Check**, or **Regular Check**.

**Regular Check:**

Allows you to set the interval between system checks.




**Parameters... :**

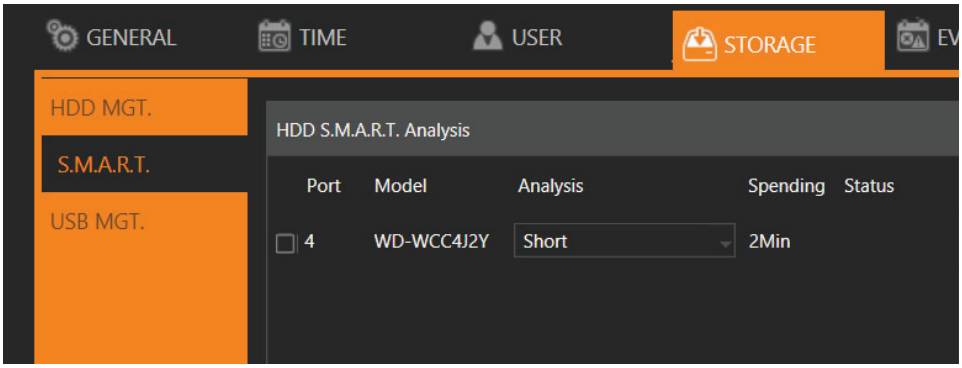



'Click' each device to enter the screen above. **System Reserve Ratio** allows you to allocate the percentage of HDD space not occupied by recorded files. In **Mount Option**, choose the writing mode for the hard drive.

# NVR SYSTEM (CONT.)

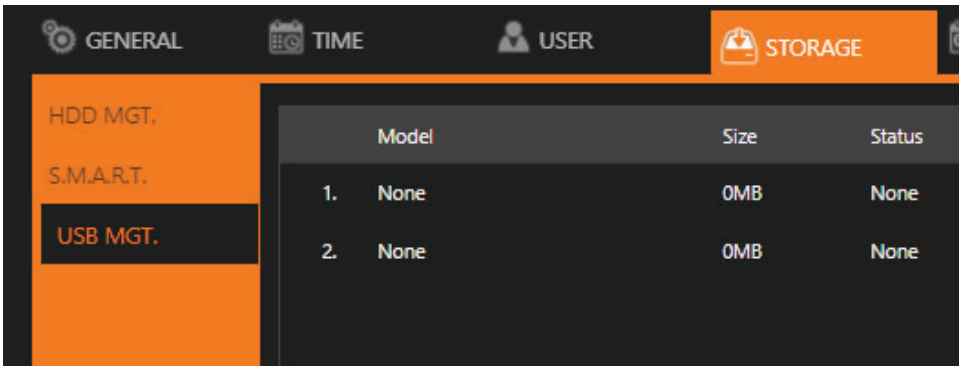
## NVR System > Storage (Continued)

### S.M.A.R.T:




The S.M.A.R.T. status of your hard drive is displayed in **S.M.A.R.T.**, where you can run analysis (either short or extended) on the HDD. Choose between **Short** or **Extended** analysis and 'click' **Analysis** to start the process. You will see HDD status, information, attributes, and event history under **HDD S.M.A.R.T. Information**.

### USB MGT.

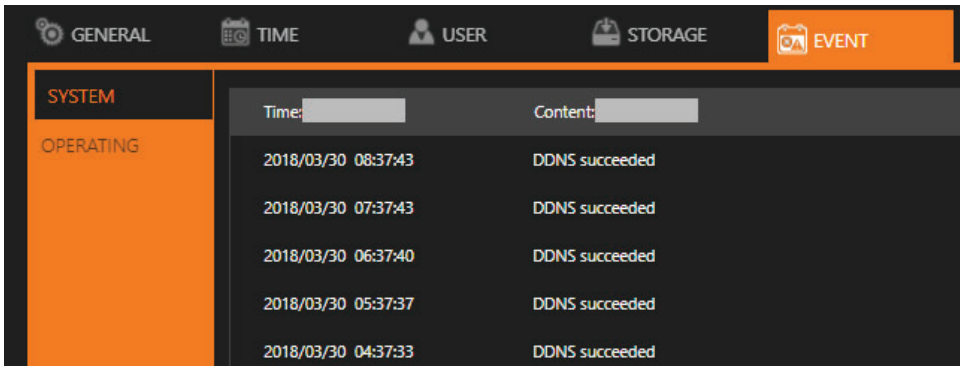



Connect a USB device (flash drive or hard drive) to the NVR, and 'check' the one you want to format under this page, and then 'click' **Format**.

# NVR SYSTEM (CONT.)

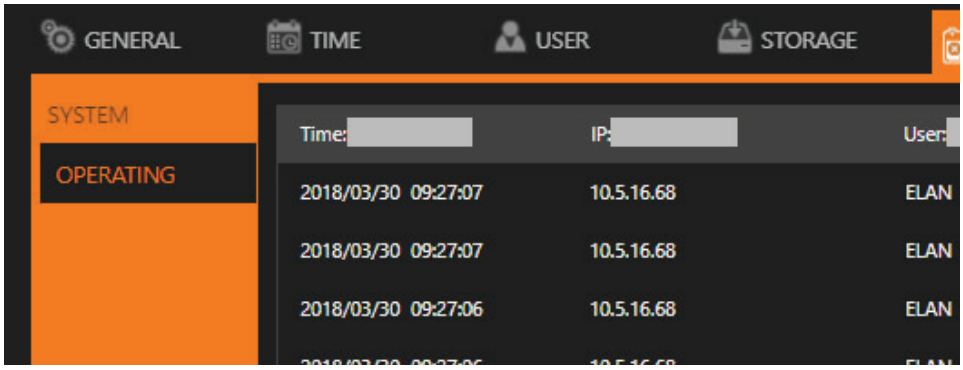
## NVR System > Event

### System:




The search field in this page allows you to search for specific event reports at different time and of different content. 'Press' **Download** to export the event report.

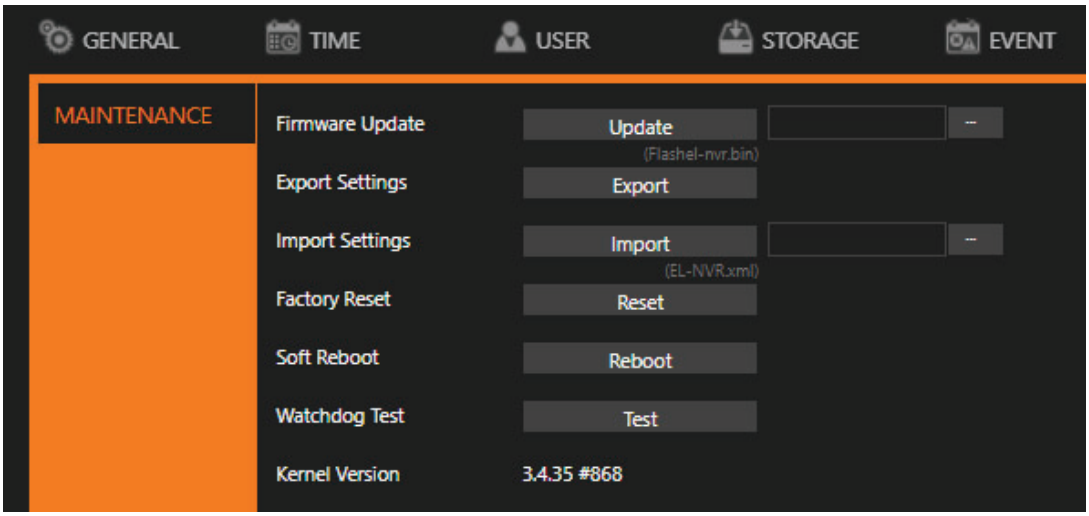
### Operating:




You can examine the operating status of different users under this page. 'Press' **Download** to export the event report.

# NVR SYSTEM (CONT.)

## System > Maintenance




**Firmware Update:**
Choose a firmware file and 'click' **Update** to proceed firmware update.
**Note:** Firmware can be also be updated via ELAN Configurator.

**Export Settings:**
'Click' **Export** to copy system settings to a USB flash drive.

**Import Settings:**
'Click' **Import** to apply a system setting that is stored in the plugged USB flash drive.

**Factory Reset:**
'Click' **Reset** to restore the system to the factory settings.

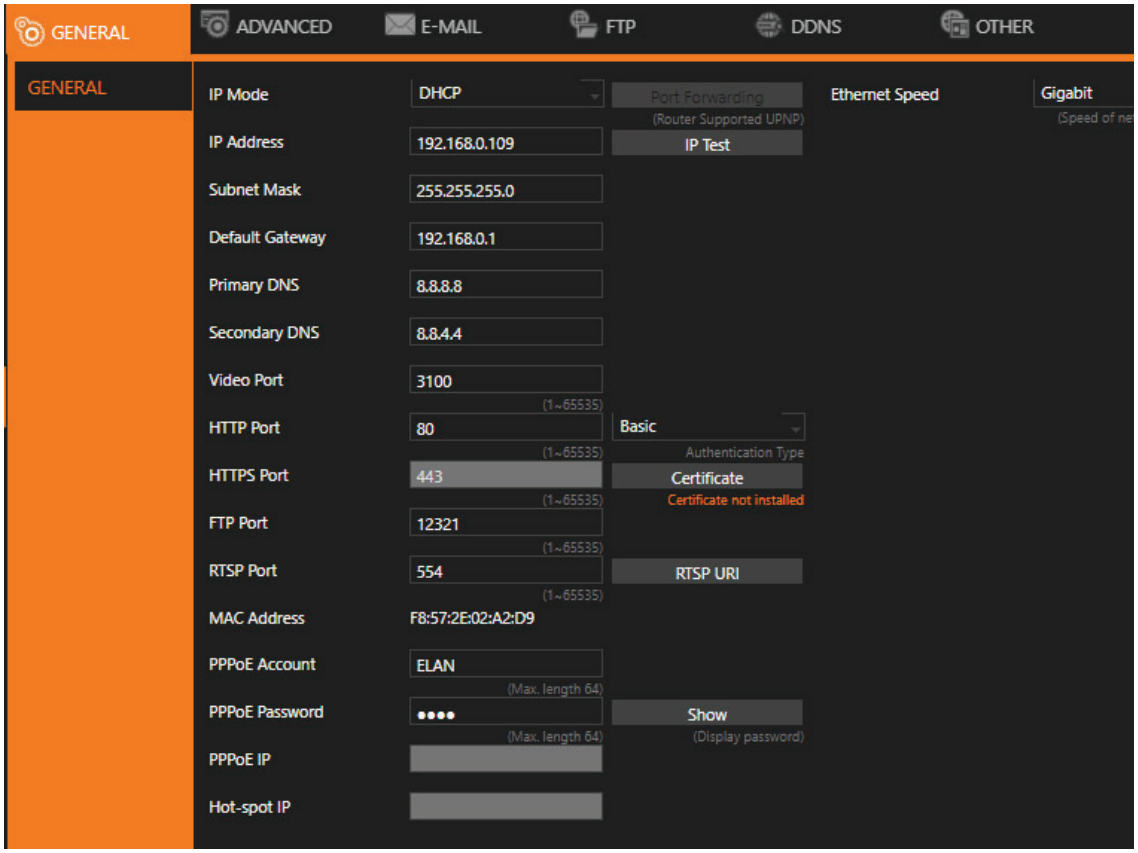
**Soft Reboot:**
'Click' to soft reset the system.

**Watchdog Test:**
'Click' to test the system watchdog function. This will reboot the NVR.

**Kernel Version:**
The kernel version of the system.

# NETWORK SETUP

## Network Setup > General




Enter the required information in the fields:

**IP Mode:**
Select the connection type of the NVR from Static, DHCP, and PPPoE.

**IP Address:**
Enter the IP address you want to use, and 'press' IP Test if necessary.

**IP Test Button:**
'Clicking' on IP Test prompts NVR to scan and verify if the IP address you entered is available.

**Subnet Mask:**
Enter the desired subnet mask.

**Default Gateway:**
Enter the desired default gateway.

**Primary DNS:**
Enter the first priority DNS server.

**Secondary DNS:**
Enter the secondary DNS server in case the primary DNS is not available.

**Video Port:**
Specify a desired video port.

**HTTP Port:**
Specify a desired HTTP port.

# NETWORK SETUP (CONTINUED)

## Network Setup > General (Continued)

**FTP Port:**
Specify the desired FTP port.

**MAC:**
This is the MAC address of your NVR.

**PPPoE Account:**
If you choose to connect through PPPoE, enter the account name here.

**PPPoE Password:**
Enter the required password for PPPoE connection.

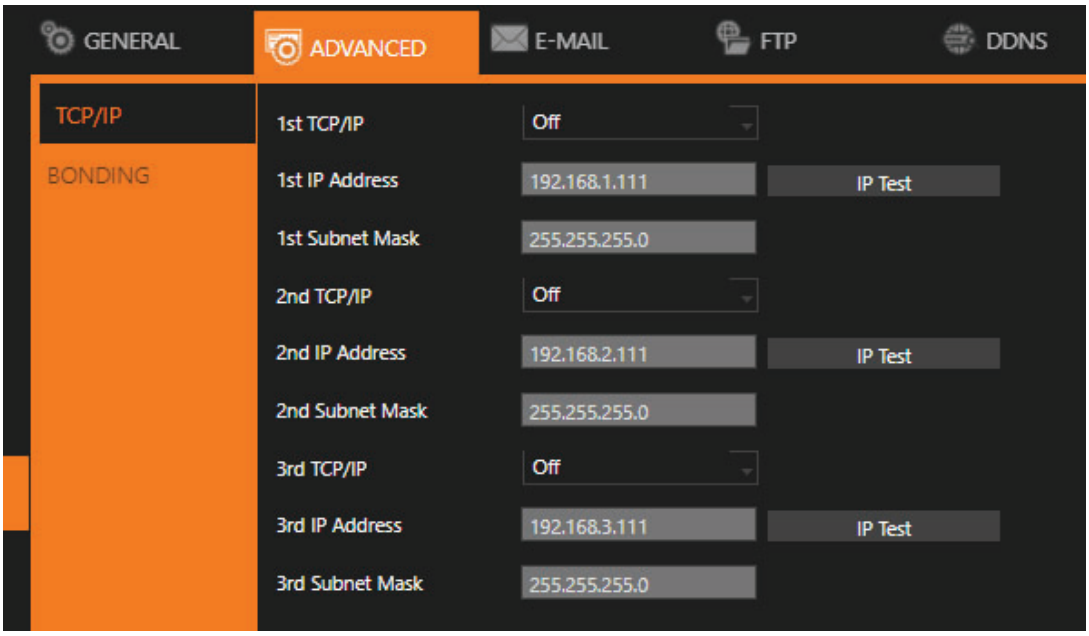
**PPPoE IP:**
Your PPPoE IP will be displayed here.

**Hotspot IP:**
Your hotspot IP will be displayed here.

**Note:** When connected to an Android device via a USB connector, please turn ON the USB tethering function to assign a hotspot IP to the NVR.

## Network Setup > Advance

**TCP/IP:**



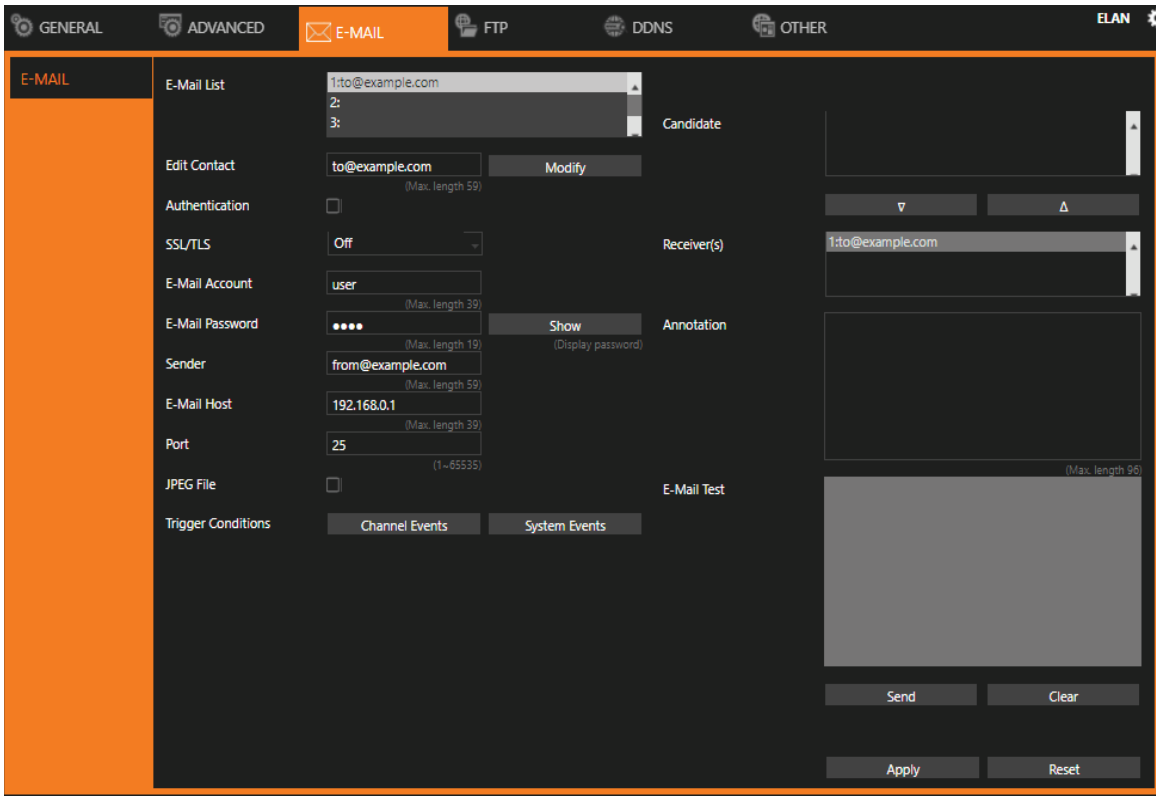

NVR supports three sets of virtual IP addresses. When **TCP/IP** is switched **On**, the NVR can access the camera or another NVR using the specific IP.

**Note:** For VLAN application only.

# NETWORK SETUP (CONTINUED)

## Network Setup > E-Mail

When an alarm is triggered, the NVR can automatically send e-mail notifications to the recipients you designated. The setting options are described below:




**Send E-Mail:**
'Check' the box to enable sending e-mail notifications when an alarm is triggered.

**E-Mail List:**
The list shows all saved e-mail addresses.

**Edit Contact:**
Enter the email address you want to save as contacts and 'click' Modify.

**Authorization:**
'Check' if your e-mail account requires login authorization.

**SSL/TLS:**
'Check' if your e-mail sever requires encryption.

**E-Mail Account:**
Enter the account name of your e-mail.

**E-Mail Password:**
Enter the password of your e-mail.

**Sender:**
Enter the name you would like to display in the e-mail.

# NETWORK SETUP (CONTINUED)

## Network Setup > E-Mail (Continued)

**E-Mail Host:**
Enter the mail server address of your e-mail server.

**Port:**
Enter the port of your e-mail server.

**JPEG File:**
'Check' to also attach JPEG photos when an alarm is triggered.

**Candidate:**
Choose an email address and 'press' Down or Up arrows to add contacts as recipients.

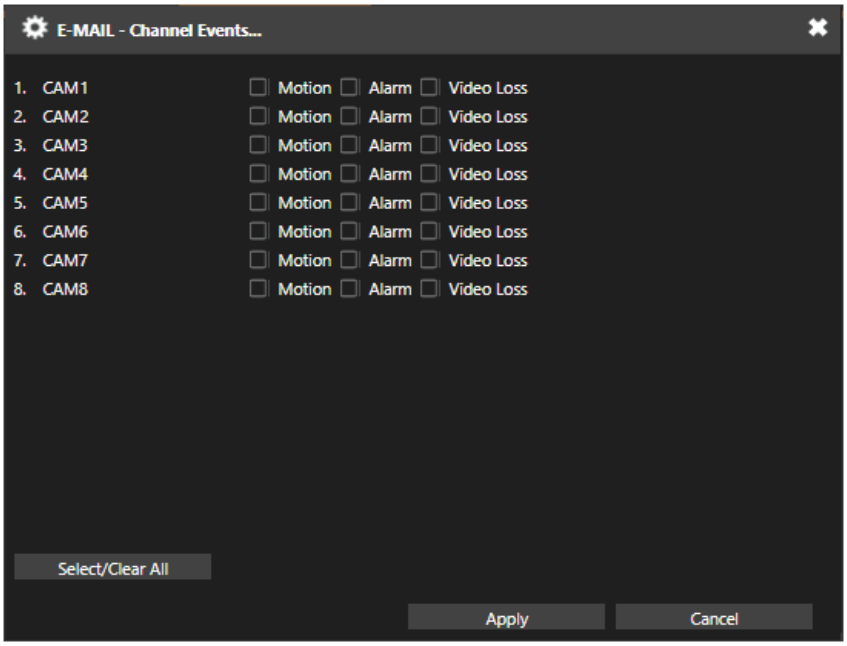
**Receiver:**
The list of recipient(s).

**Annotation:**
Content of the email notification.

**Trigger Conditions:**
Designate when to send the notification email by Channel Events and System Events.

**Channel Events:**

'Click' to open the dialog below.




**Motion:**
'Check' to send e-mail when movements are detected.

**Alarm:**
'Check' to send e-mail when external alarms are set off.

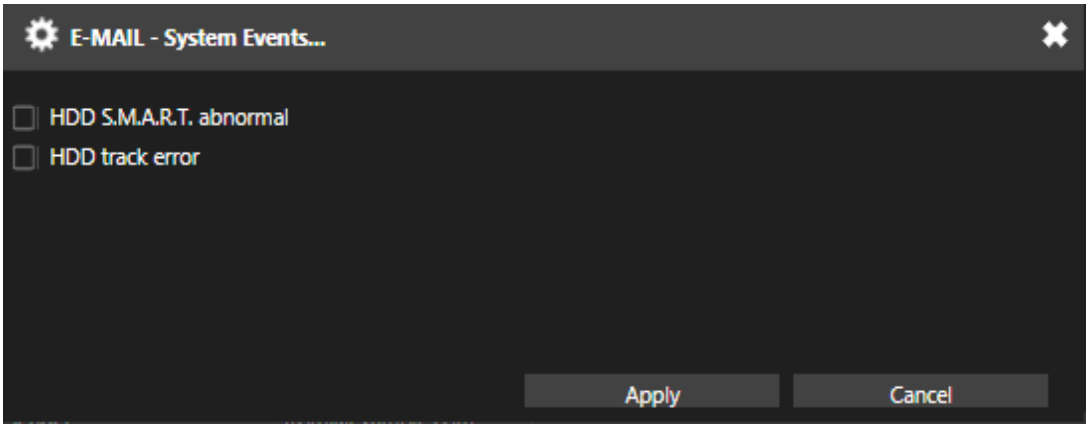
**Video Loss:**
'Check' to send e-mail when connection with IP Camera is lost.

# NETWORK SETUP (CONTINUED)

## Network Setup > E-Mail (Continued)

### System Events:

'Click' to open the dialog below.




**HDD S.M.A.R.T. abnormal**

'Check' to send E-Mail when an S.M.A.R.T. error is detected.

**HDD track error:**

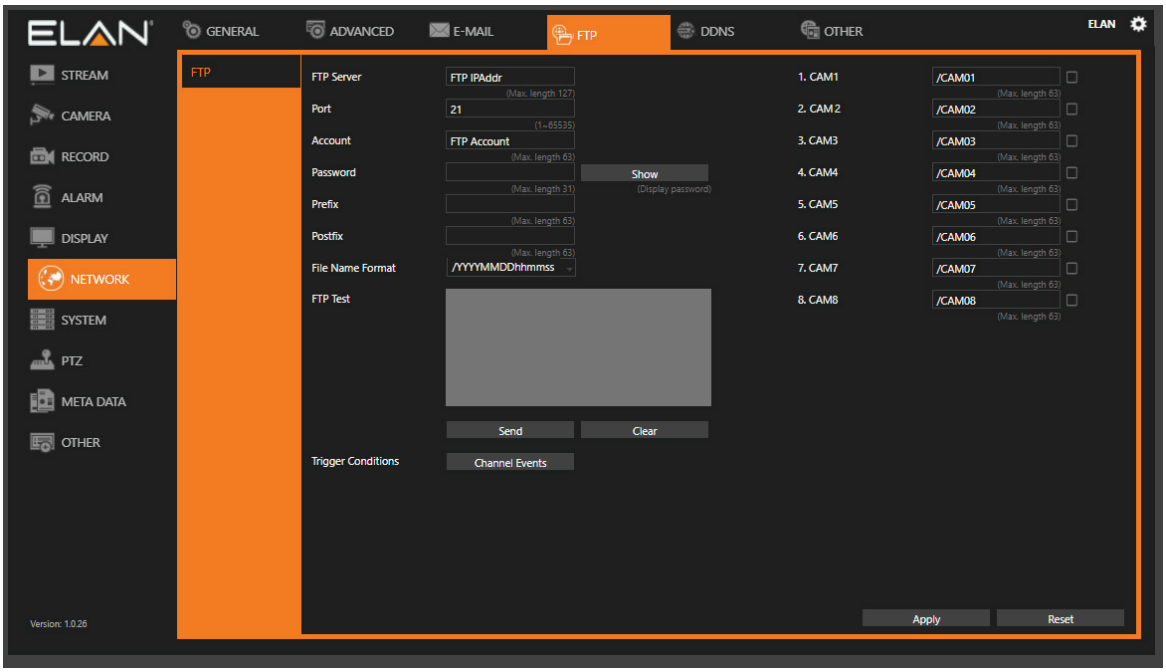
'Check' to send E-Mail when an HDD error is detected.

**E-Mail Test:**

'Click' **Apply** to send the testing email to verify the settings.

# NETWORK SETUP (CONTINUED)

## Network Setup > FTP




**FTP Server:**
Enter the IP address of the FTP server.

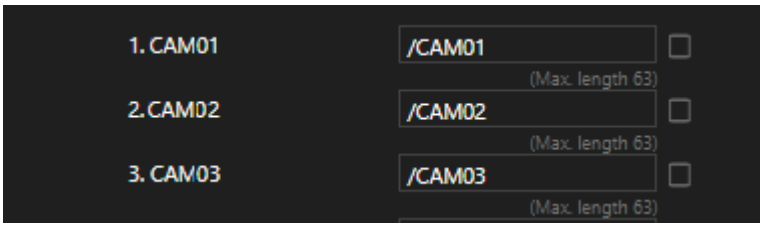
**Port:**
Enter the port of the FTP server.

**Account:**
Enter the account name of the FTP server.

**Password:**
Enter the password of the FTP server

**Prefix & Postfix:**
Specify the prefix and postfix of snapshot files.

**File Name Format:**
Change the file name format to suit your need.

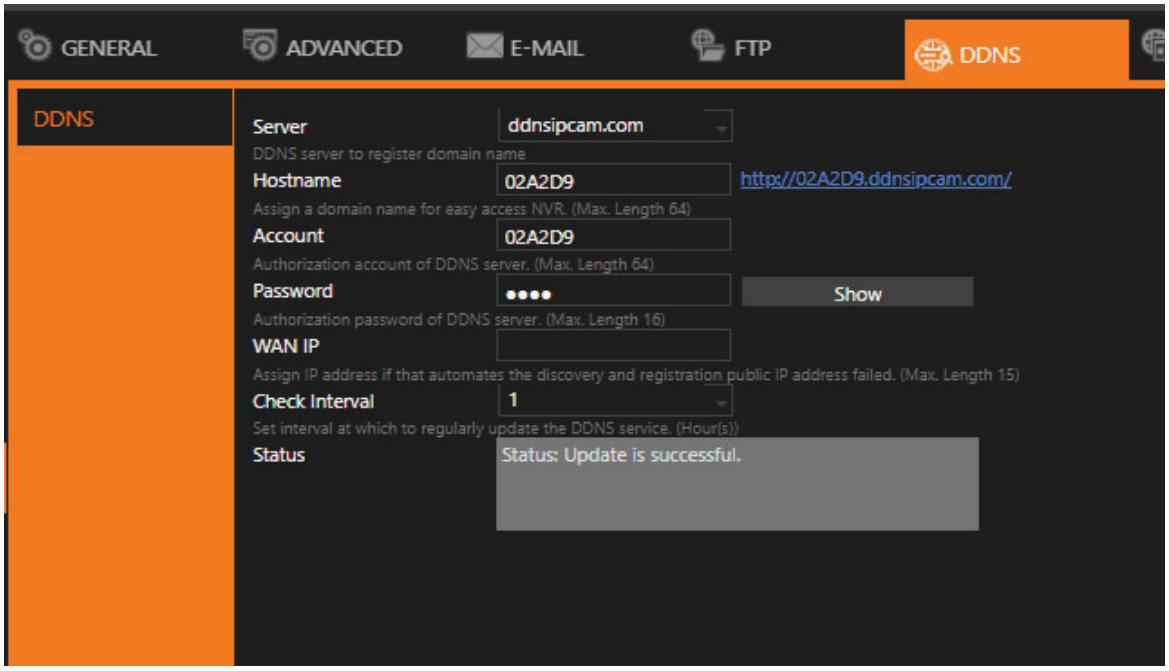



'Check' the cameras that you want to send notifications to the FTP when an alarm is triggered, and specify the folder name where the images are saved.

**Note:** For details about **Trigger Conditions** and **Channel Events**, please refer to the descriptions above.

# NETWORK SETUP (CONTINUED)

## Network Setup > DDNS




Choose the DDNS server you want to use.

**Hostname:**
Enter the hostname of the DDNS server.

**User:**
Enter the username to log in to the DDNS server.

**Password:**
Enter the password to log in to the DDNS server.

**WAN IP:**
Enter your **WAN IP** if the NVR cannot automatically get the correct address.

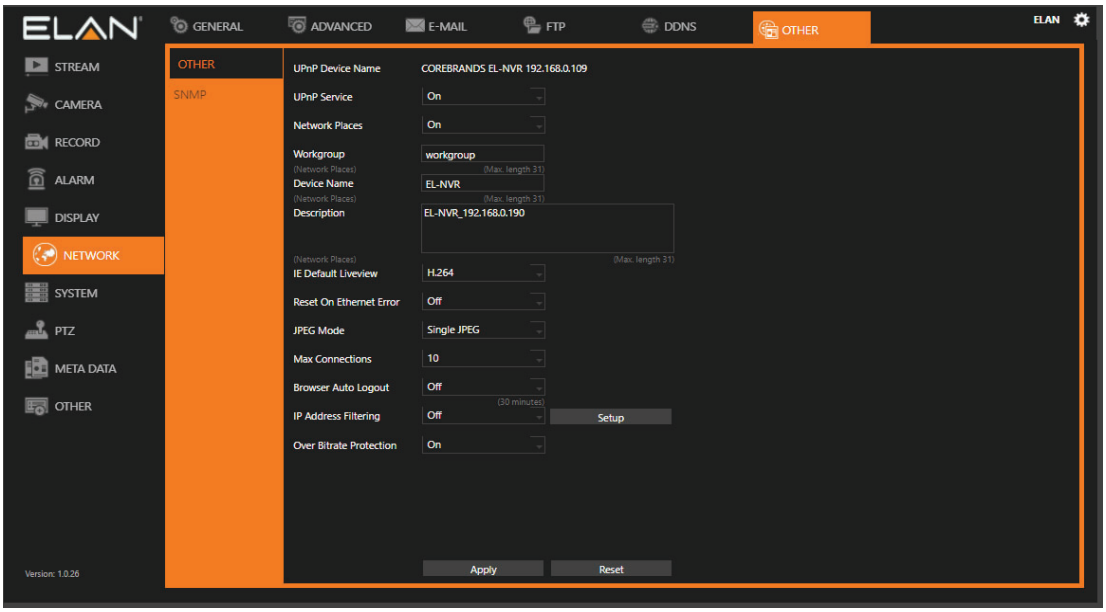
**Check Interval:**
Choose the time interval you want the system to check the DDNS connection.

**Note:** The DDNS feature requires Internet connection.

# NETWORK SETUP (CONT.)

## Network Setup > Other

The NVR also supports other protocols such as UPnP and SDDP, and related configurations can be modified in the **OTHER** tab. The setting options are described below.




Choose the DDNS server you want to use.

**UPnP Device Name:**
The device name shown on the UPnP network.

**UPnP Service:**
Switch on/off the UPnP service.

**Network Places:**
Switch on/off Network Places to display shortcuts to shared devices.

**Workgroup:**
The workgroup name displayed in Network Places.

**Device Name:**
The device name displayed in Network Places.

**IE Default Live View:**
Select the default streaming type (H.264 or MJPEG) when streaming using Internet Explorer.

**Reset on Ethernet Error:**
Reset the PHY when an Ethernet error is detected, and leave a record entry in the event table.

**Max Connections:**
Set the maximum number of simultaneous connections when streaming using Internet Explorer.

**Browser Auto Logout (30 Minutes):**
'Check' to log out after 30 minutes of inactivity.

**SDDP Device Name:**
The device name shown on the SDDP network.

**SDDP Service:**
On/Off switch for SDDP service.

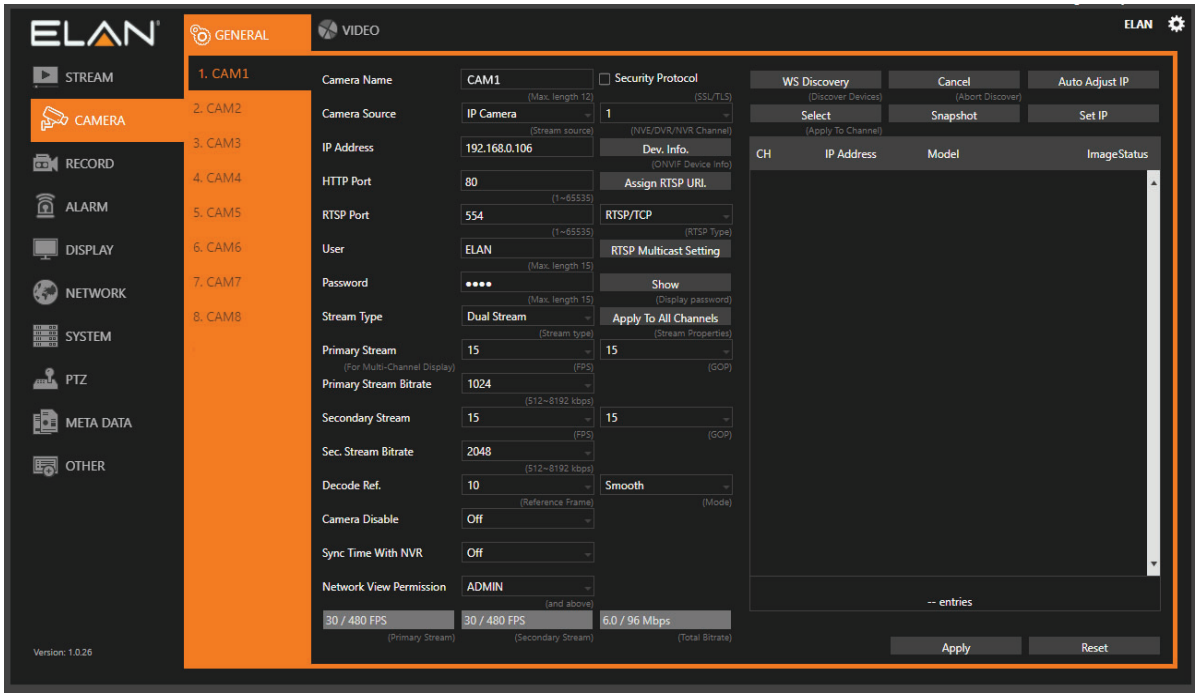
# CAMERA SETUP

## Camera Setup > General

If you are installing an ELAN Cameras and/or ELAN NVR with an ELAN Controller, please refer to the “ELAN Surveillance” Integration Note for setup and software configuration. ELAN Integration Notes are served through the ELAN tools and on elanhomesystems.com/dealer-resources.”

The software configuration information in this document can be used to extend device control parameters for use within an ELAN controller environment, or be used to operate this hardware independent of an ELAN controller.

‘Click’ settings (⚙)to enter **NVR SETTINGS**, and ‘press’ **CAMERA** ( CAMERA ) in the left pane to enter the **CAMERA SETUP** page. The setting options are described below.




The NVR supports three sets of virtual IP addresses. When **TCP/IP** is switched **On**, the NVR can access the camera or another NVR using the specific IP.

**Camera Name:**
Enter the camera name to be displayed on the streaming screen.

**Camera Source:**
Allocate a NVR channel for the camera.

**IP Address:**
Enter the IP address of the camera you want to connect.

**Dev. Info:**
‘Press’ to check ONVIF capability.

**HTTP Port:**
Enter the port for HTTP connection.

**RTSP Port:**
Enter the port for RTSP connection.

# CAMERA SETUP (CONT.)

## Camera Setup > General (Continued)

**User:**
Enter the username required for camera authorization.

**Password:**
Enter the password required for camera authorization.

**Stream Type:**
Choose whether to stream only the primary video or dual (primary & secondary) videos.

**Primary Stream:**
Select the FPS and GOP for the primary stream.

**Primary Stream Bitrate:**
Select the bitrate for the primary stream.

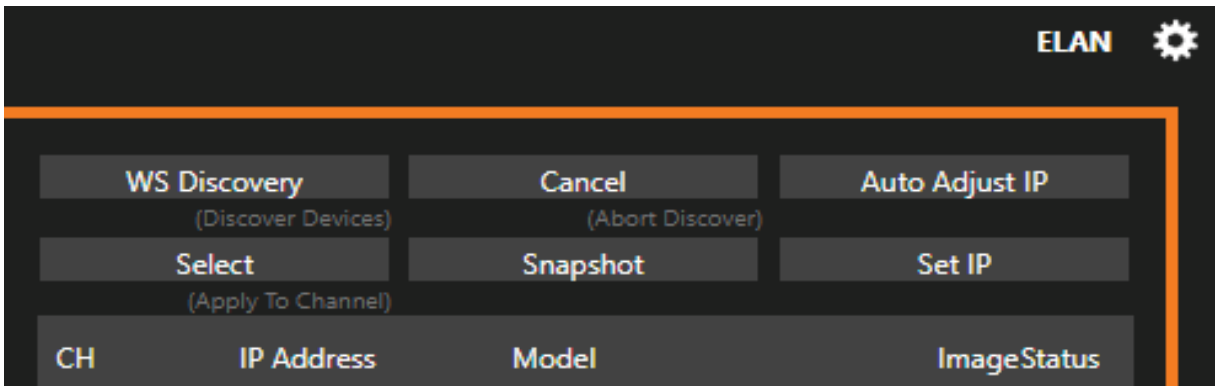
**Secondary Stream:**
Select the FPS and GOP for the secondary stream (available only if **Dual Stream** is activated in **Stream Type**).

**Sec. Stream Bitrate:**
Select the bitrate for the secondary stream.

**Decode Ref. :**
Select the number of reference frame for the decoder, and choose **Immediate** for lower latency or **Smooth** for smoother but higher latency video.

**Camera Disable:**
Disable the video function (live feeds and playback) of the selected camera.

**Sync Time with NVR:**
Turn **On** for the camera to sync time with the NVR.




**WS Discovery:**
'Click' **WS Discovery** to scan for connected devices on the network. *'Click'* **Cancel** *to stop scanning.*
'Click' on camera, if found.
'Click' **Apply** to save connected cameras.

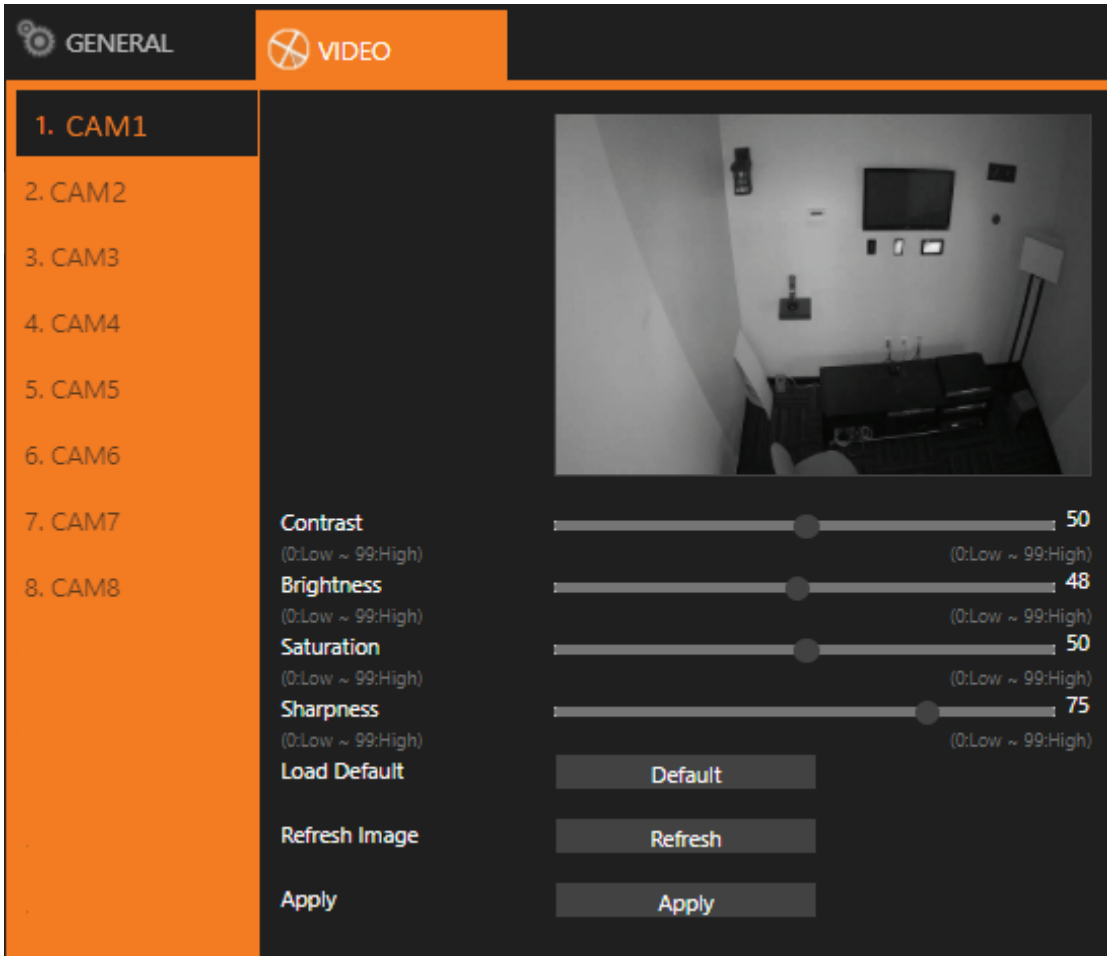
**Auto Adjust:**
Automatically assign IP for connected cameras.

**Snap:**
Show snapshot thumbnails for all the cameras.

**Set IP:**
Assign an IP address to the camera.

# CAMERA SETUP (CONT.)

## Camera Setup > Video



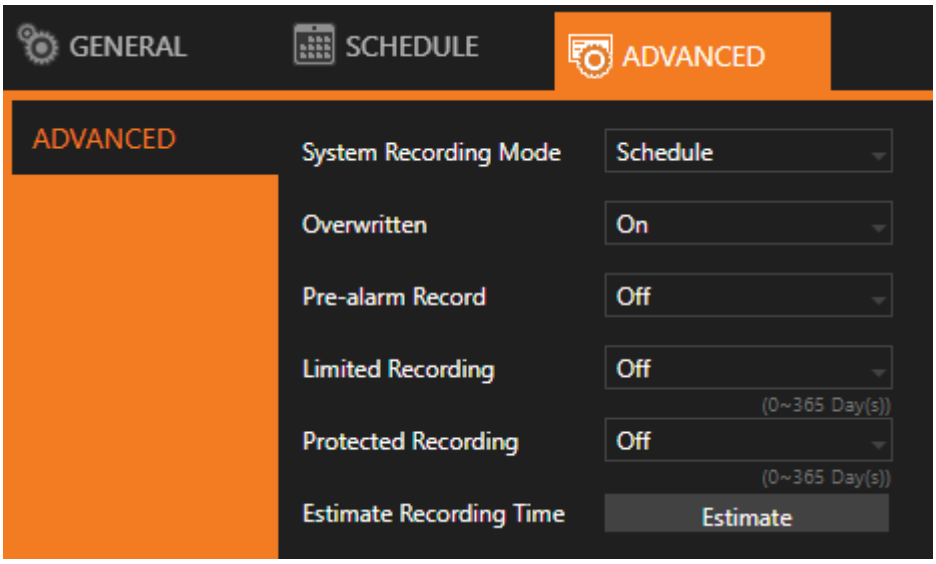

On this page, you can adjust several camera parameters including **Contrast**, **Brightness**, **Saturation**, and **Sharpness**.

'Click' **Default** to restore the NVR to its factory settings. 'Click' **Refresh** to update the preview image.

# RECORD SETUP

## Record Setup > General

'Click' settings ( )to enter **NVR SETTINGS**, and 'press' **RECORD** ( RECORD ) in the left pane to enter the **RECORD SETUP** page. The setting options are described below.




**Record Mode:**
Switch on/off scheduled recording.

**Audio:**
Switch on/off audio recording.

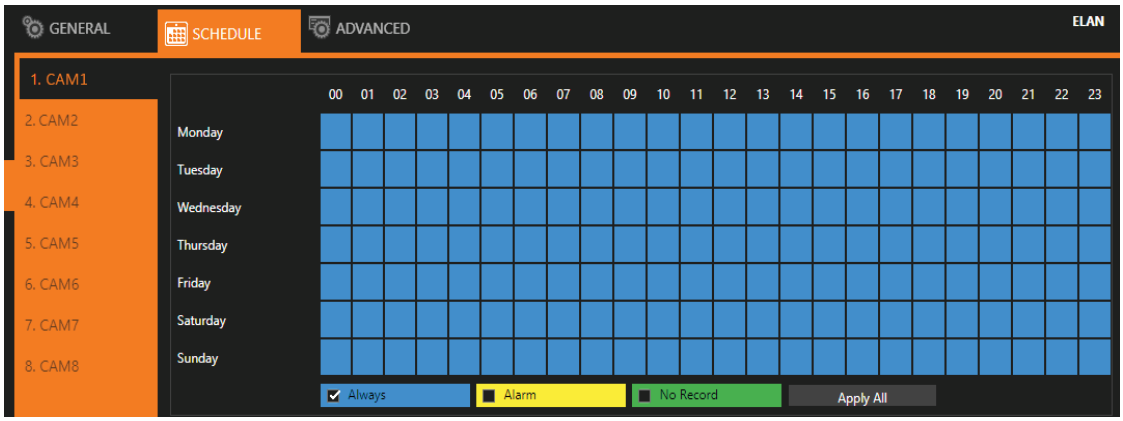
**Post-alarm Record:**
Enable to record after an event takes place. Set the time (second) for the NVR to record after the alarm is triggered.

**Weighted Record:**
If any alarm is triggered when **Weighted Record** is turned on, the recording frame rate will be adjusted to the predetermined value (which can be set in **CAMERA SETUP**). Otherwise, the NVR will record at a lower frame rate (approximately 4–5 FPS).

**Note:** System Recording Mode must set to Schedule and Recording schedule set to Always for 24/7 recording.

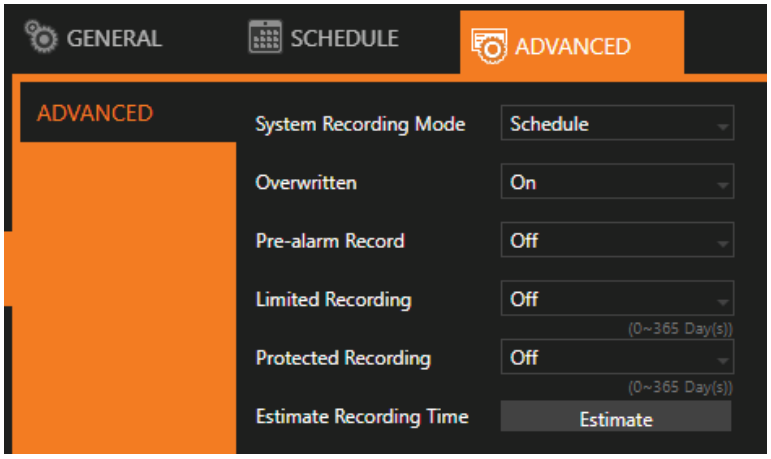
# RECORD SETUP (CONT.)

## Record Setup > Schedule




To modify the recording schedule, switch the recording type from **Always** (continuous recording), **Alarm** (record only when an alarm is triggered), or **No Record** (disable recording), and highlight the desired date and time accordingly. 'Click' **Apply All** to apply your selection of recording type to all dates and time.

## Record Setup > Advanced




**System Recording Mode:**
Choose between **Manual** or **Scheduled** recording.

**Overwritten:**
Switch on to overwrite old files when the storage is full.

**Pre-alarm Record:**
Switch on to start recording for a period before an alarm occurs.

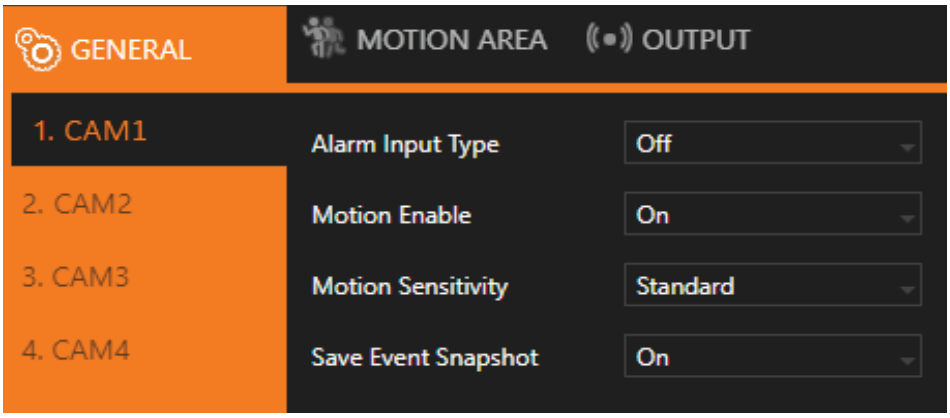
**Limited Recording:**
Set the number of days to record (from now to the designated day).

**Protected Recording:**
Set how many days of video the NVR will preserve.

# ALARM SETUP

'Click' settings (⚙)to enter **NVR SETTINGS**, and 'press' **ALARM** ( ALARM ) in the left pane to enter the **ALARM SETUP** page. The setting options are described below.

## Alarm Setup > General




**Alarm Input Type:**
Set the alarm sensor to Normally Open (NO), Normally Closed (NC), or IP Camera. The last option will trigger the alarm only when receiving a signal from IP cameras.

**Motion Enable:**
Switch On/Off motion detection. Remember also to set the motion detection area in the tab **MOTION AREA.**

**Motion Sensitivity:**
Adjust the sensitivity of motion detection. Higher sensitivity indicates that the alarm can be more easily triggered.

**Save Event Snapshot:**
Enable to store a snapshot on the hard drive when an alarm is triggered.

# ALARM SETUP (CONT.)

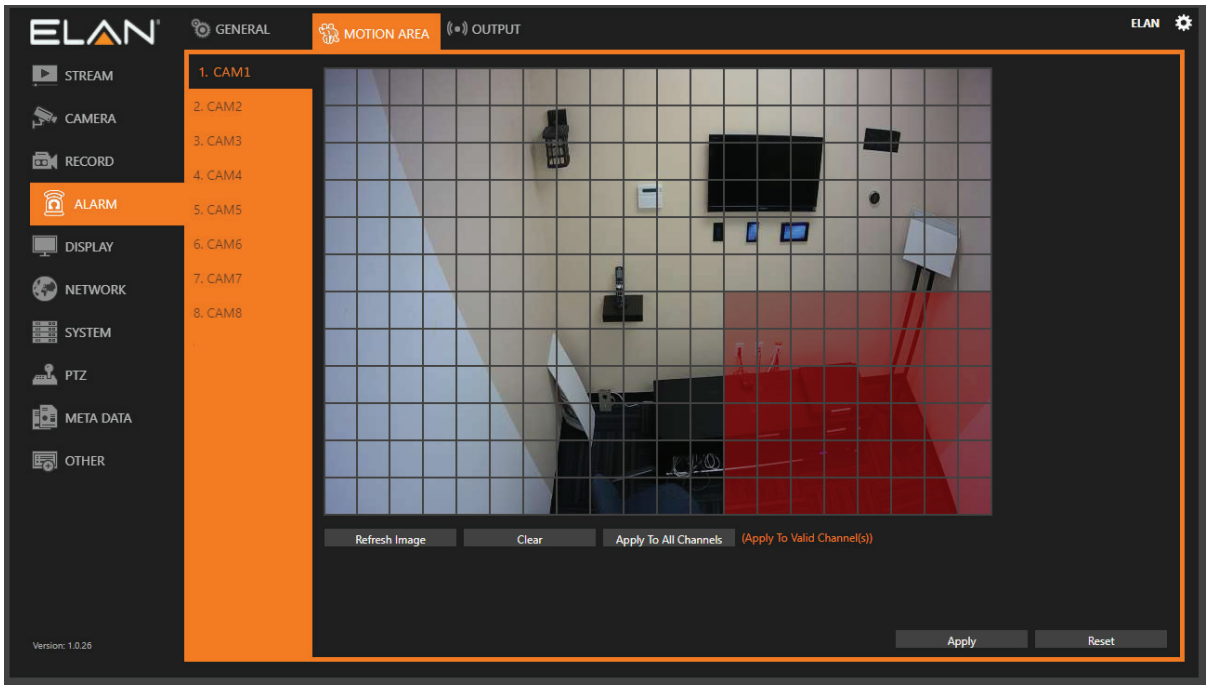
'Click' settings (⚙)to enter **NVR SETTINGS**, and 'press' **ALARM** (ALARM) in the left pane to enter the **ALARM SETUP** page. The setting options are described below.

## Alarm Setup > Motion Area

Selecting Motion Detection Areas:

- Activating individual or multiple Motion Detection Zones
  - 'Clicking' on individual cells or dragging multiple cells using mouse activates selected motion detection areas, turning the cells red.
  - When finished selecting zones, 'click' **Apply**.
  - 'Clicking' **Apply All Channels** applies selected areas to all camera channels.

  **Note:** This function is disabled for IntelliVision enabled cameras.




**Selecting Motion Detection Areas:**
'Clicking' individual zones or 'clicking' while dragging the cursor across the grid highlights the motion detection areas. 'Click' and Apply All Channels to apply the areas to all camera channels.

**Alarm Input Type:**
Set the alarm sensor to **Normally Open (NO)**, **Normally Closed (NC)**, or **IP Camera**. The last option will trigger the alarm only when receiving a signal from IP cameras.

**Motion Enable:**
Switch on/off motion detection. Remember also to set the motion detection area in the tab labeled **MOTION AREA.**

**Motion Sensitivity:**
Adjust the sensitivity of motion detection. Higher sensitivity indicates that the alarm can be more easily triggered.

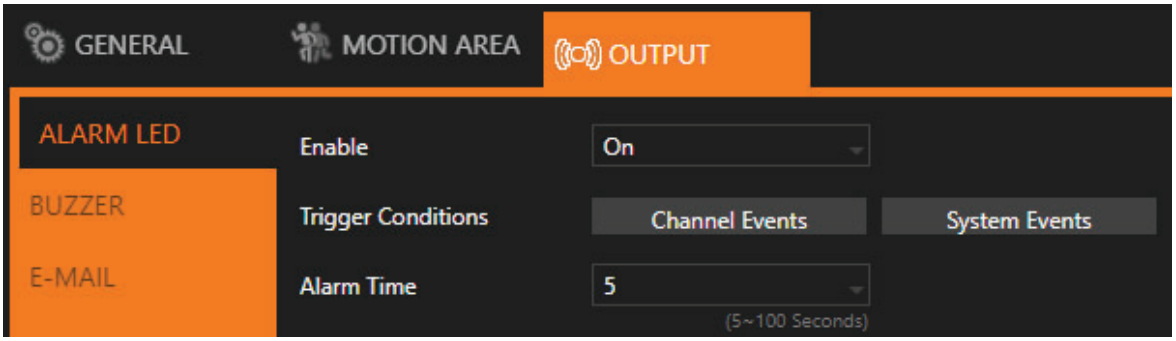
**Save Event Snapshot:**
Enable to store a snapshot on the hard drive when an alarm is triggered.

# ALARM SETUP (CONT.)

'Click' settings (⚙)to enter **NVR SETTINGS**, and 'press' **ALARM** (ALARM) in the left pane to enter the **ALARM SETUP** page. The setting options are described below.

## Alarm Setup > Output

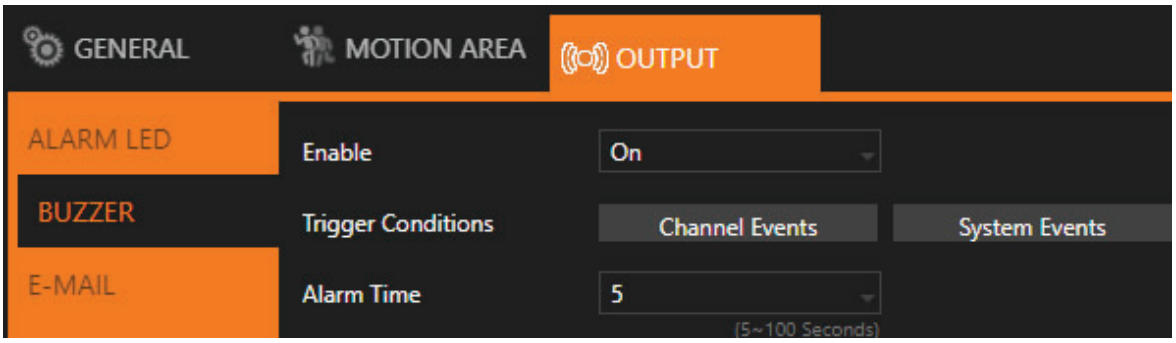
### ALARM LED




**Enable:**
Turn **On** to activate the alarm LED.

**Trigger Conditions:**
See **Channel Events** and **System Events** above for more details.

### BUZZER:




**Enable:**
Turn **On** to activate the buzzer.

**Alarm Time:**
Beeping duration of the buzzer when an alarm is triggered.

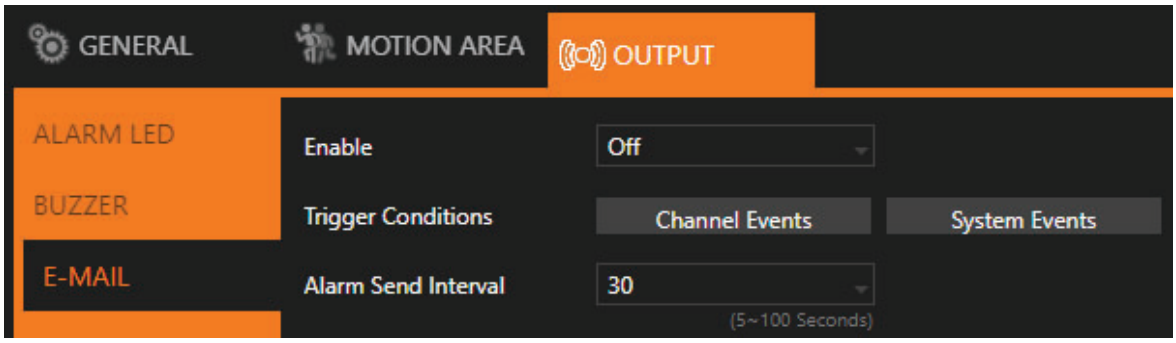
**Note: SYSTEM SETUP > GENERAL > Buzzer** must be enabled.

**Trigger Conditions:**
See **Channel Events** and **System Events** above for more details.

# ALARM SETUP (CONT.)

## Alarm Setup (Cont.) > Output (Cont.)

### E-Mail




**Enable:**
Turn **On** to activate e-mail sending.

**Trigger Conditions:**
See **Channel Events** and **System Events** above for more details.

**Alarm Send Interval:**
Set the frequency of sending alarm notification e-mail.

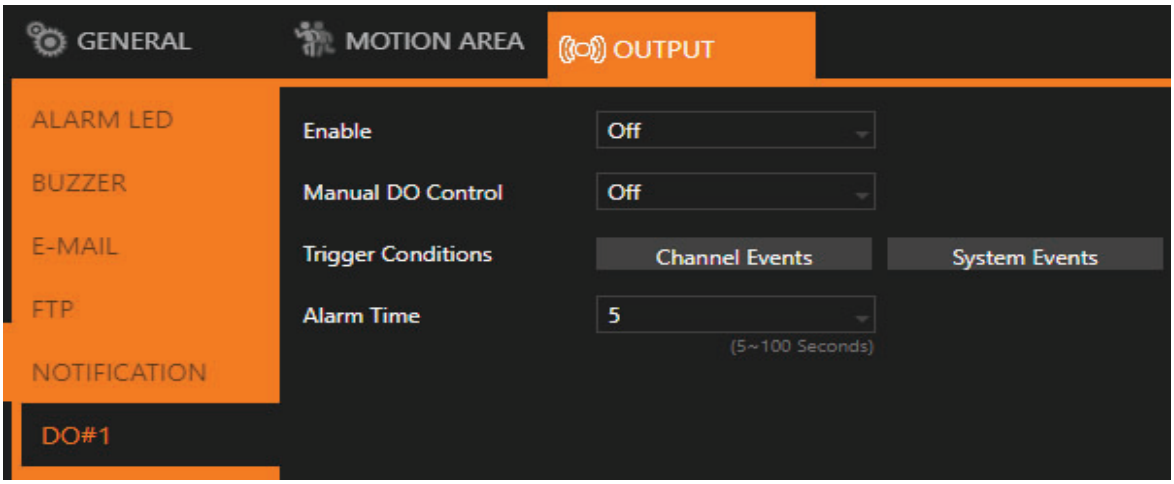
**NOTIFICATION:**

Push notifications are sent from the ELAN Controller.

# ALARM SETUP (CONT.)

## Alarm Setup (Cont.) > Output (Cont.)

### DO#1–N (Manual DO control)




**Manual DO control:**

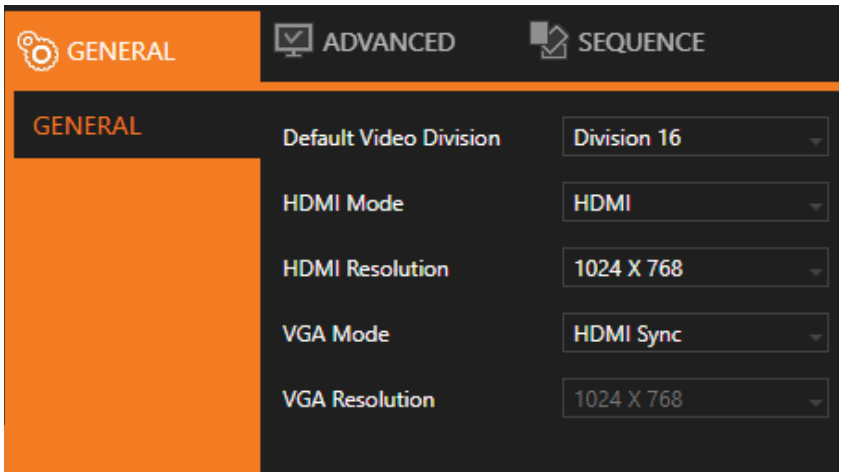
Turn **On** to enable DO, the live video of which will show the corresponding alarm output number.

**Note:** For other options, please refer to the descriptions in the beginning of this section.

# DISPLAY SETUP

**DISPLAY** (DISPLAY) provides several adjustable NVR parameters such as resolution, default number of split views, and more other options. The details of these settings are described as follows:

## Display Setup > General




**Backlight Saving:**
Adjust the level of screen brightness reduction once the time specified in **Monitor Standby Time** is reached.

**Monitor Standby Time:**
Set the time of inactivity for the monitor to enter the standby mode.

**Default Video Division:**
Select the number of split views you see when the NVR boots up.

**HDMI Mode:**
Switch the output mode between DVI and HDMI.

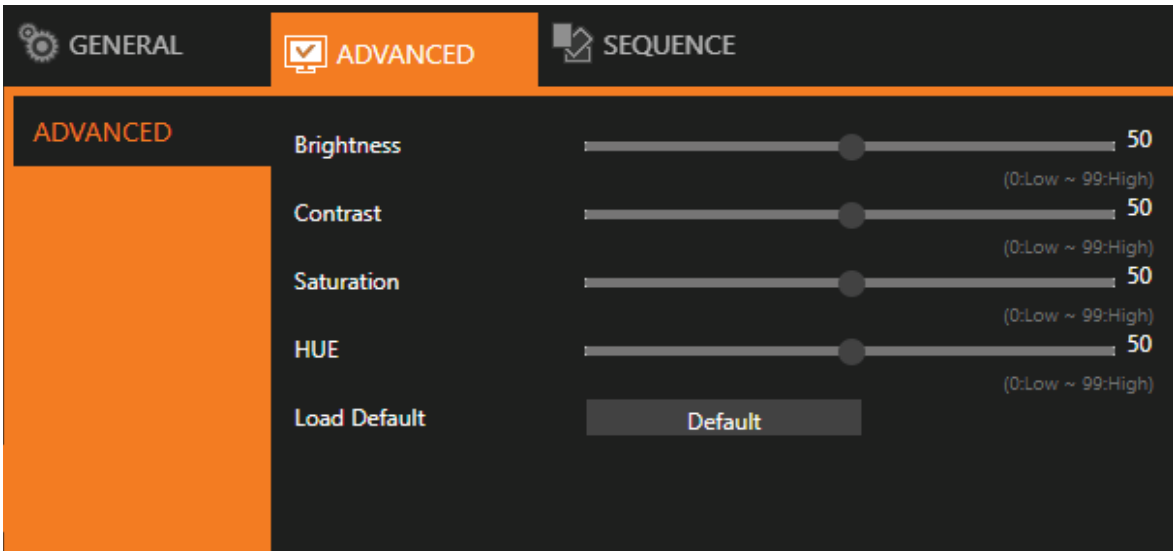
**HDMI Resolution:**
Select a screen resolution that fits your screen.

**VGA Mode:**
Choose **HDMI Sync** to synchronize the videos for VGA and HDMI outputs. Choose **SPOT** to display an HDMI/VGA switch button in the real-time view. 'Click' the switch button to switch control of split views between HDMI/VGA.

**Note:** Availability depends on models.

# DISPLAY SETUP (CONT.)

## Display Setup > Advanced



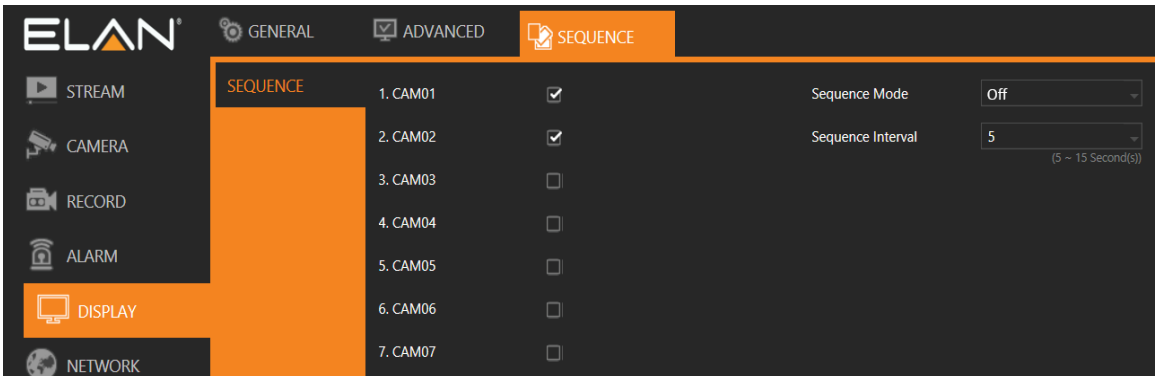

In this page, you can adjust brightness, contrast, and saturation of the NVR output. Also, it is possible to change of intensity of the 2DNR and 3DNR noise reduction feature.

'Click' **Default** to restore to the factory settings.

**Note:** Availability depends on models.

# DISPLAY SETUP (CONT.)

## Display Setup > Sequence

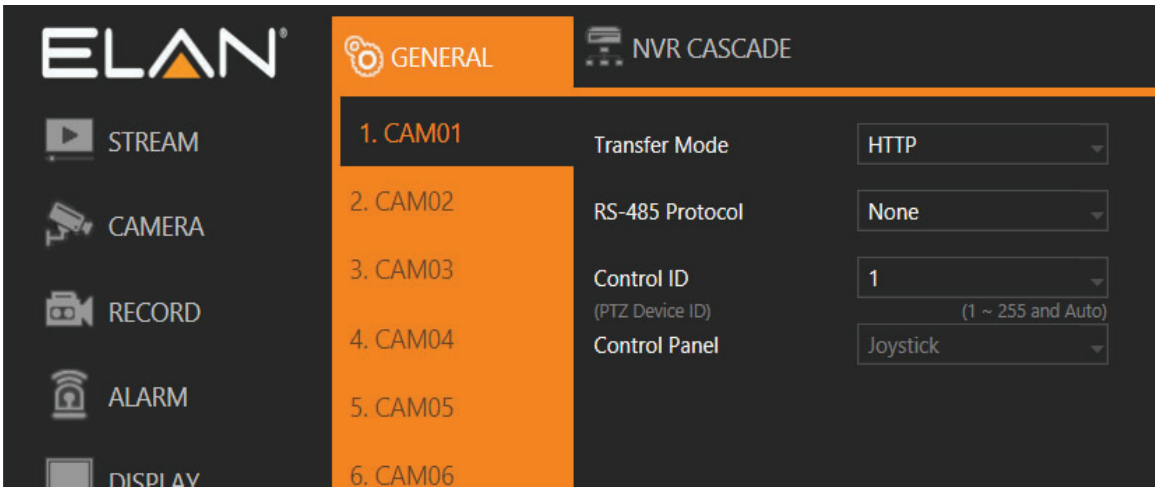



You are allowed to view videos of multiple cameras in sequence. 'Check' the cameras you want to monitor and choose the number of split views in the drop-down menu in **Sequence Mode**. Specify the **Sequence Interval** for the NVR to switch to the next camera for monitoring.

# PTZ SETUP

'Click' settings (⚙)to enter **NVR SETTINGS**, and 'press' **PTZ** (PTZ) in the left pane to enter the **PTZ SETUP** page. The setting options are described below.

## PTZ Setup > General




**Transfer Mode:**
Choose a PTZ communication protocol from HTTP, ONVIF, or Fish Eye. Otherwise use RS- 485.

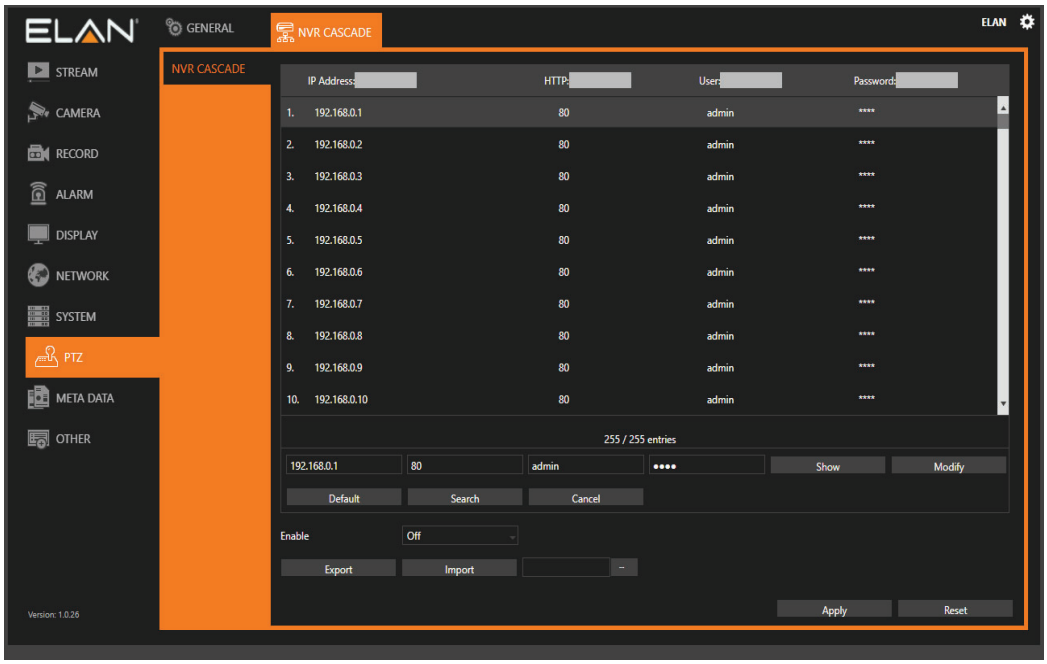
**RS-485 Protocol:**
Choose a RS-485 control protocol for your RS-485 PTZ device.

**Note: Transfer Mode** must be set to **RS-485**. Availability depends on models.

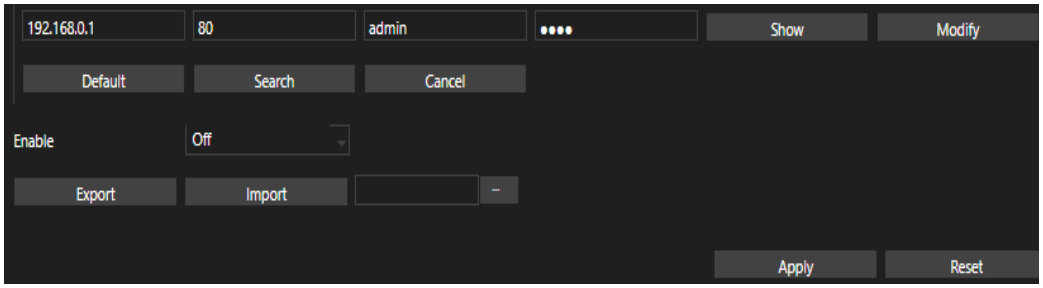
**Control ID:**
Choose the corresponding device ID to control the camera.

# PTZ SETUP (CONT.)

## PTZ Setup > NVR Cascade




This tab allows you to cascade multiple NVRs or adjust relevant settings. For detailed instructions on how to use the NVR cascade function, contact ELAN technical support. The settings listed in this tab are described, as follows:




**Show/Hide:**
Reveal or hide the password.

**Modify:**
Apply the changes you've made.

**Default:**
Restore to factory settings.

**Search:**
Find all other NVR(s) connected to your network.

**Export:**
Export the settings to the USB flash drive connected to the NVR.

**Import:**
Load the settings from the USB flash drive connected to the NVR.

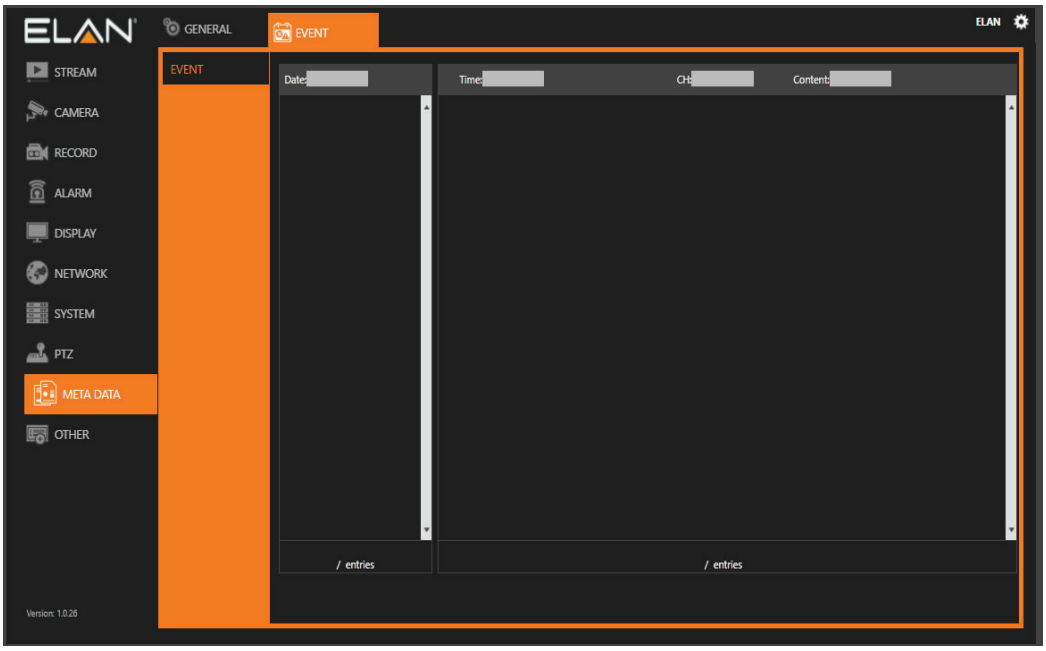
# META DATA SETUP

## Meta Data Setup > General

The NVR supports various external devices such as GPS or POS, and in this page you are allowed the change the settings for these devices.

**Notes:**

- The Meta Data tab is pre-configured for IntelliVision enabled ELAN cameras.
- The settings are pre-defined for ELAN Surveillance cameras with IntelliVision Analytics. Modifying these settings is not recommended.




**Serial Input:**
Select the USB port to which your external device is connected.

**Metadata Service:**
Turn **On** to enable using external devices.

**Serial Device Server:**
Enter the server IP for your serial device.

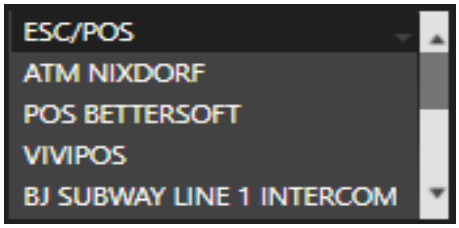
**Server Data Port:**
Enter the port of your serial device.

**Server Command Port:**
Enter the command port of the device.

**Emulated Mode:**
Choose an emulation type from the drop-down menu (see image below).

# META DATA SETUP (CONT.)

## Meta Data Setup > General (Cont.)




**Encoding Mode:**
Choose between ASCII and UTF-8.

**Baud Rate:**
Select an option suitable for your device.

**Data Size:**
Select an option suitable for your device.

**Parity:**
Select an option suitable for your device.

**Stop Bit:**
Select an option suitable for your device.

**Flow Control:**
Select an option suitable for your device.

**OSD Font Color:**
Choose a color for the OSD font from the spectrum (see image below).

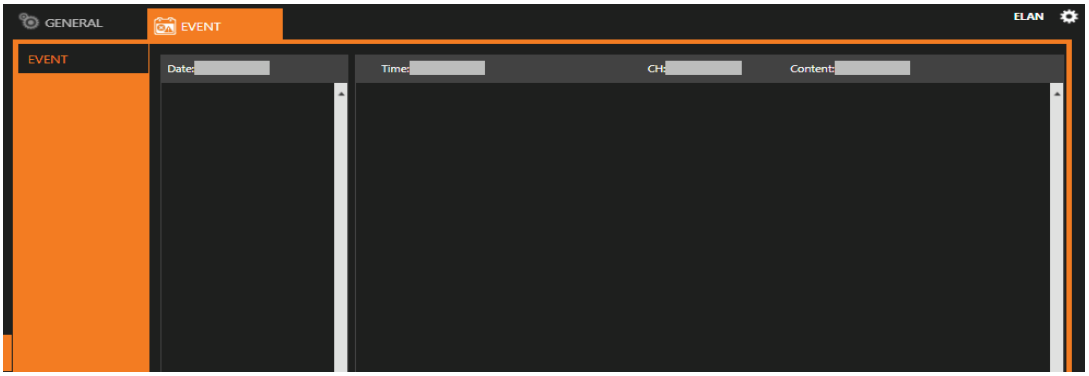

**OSD Font Size:**
Enter a value as the font size.

**OSD Rows Displayed:**
Determine the number of rows for the OSD.

# META DATA SETUP (CONT.)

## Meta Data Setup > General (Cont.)

## Meta Data Setup > Event

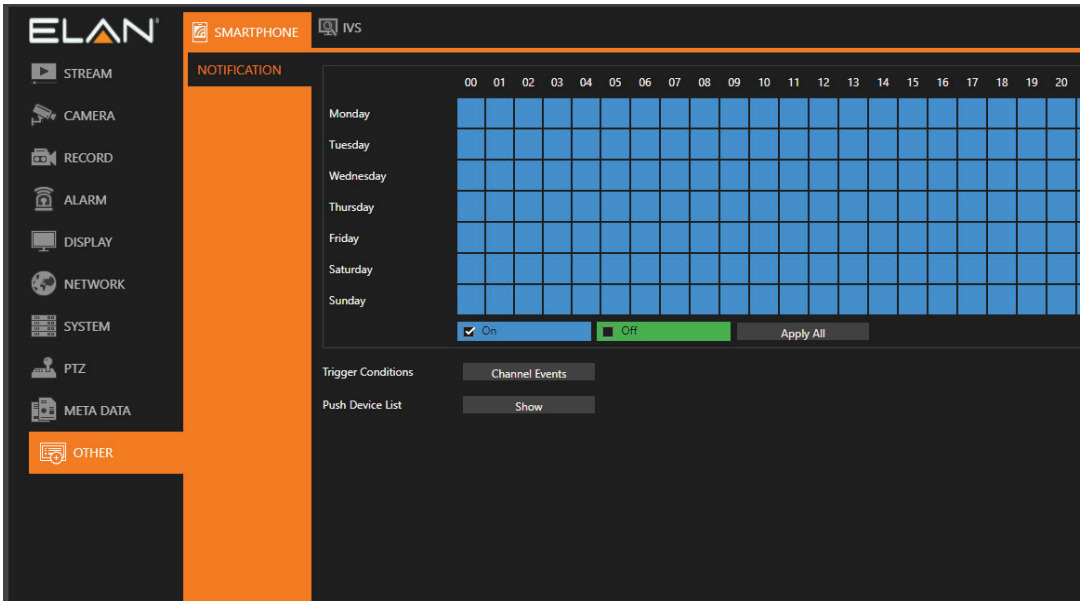



This tab displays a history of received metadata. You are allowed to search for events based on time, channel, or content.

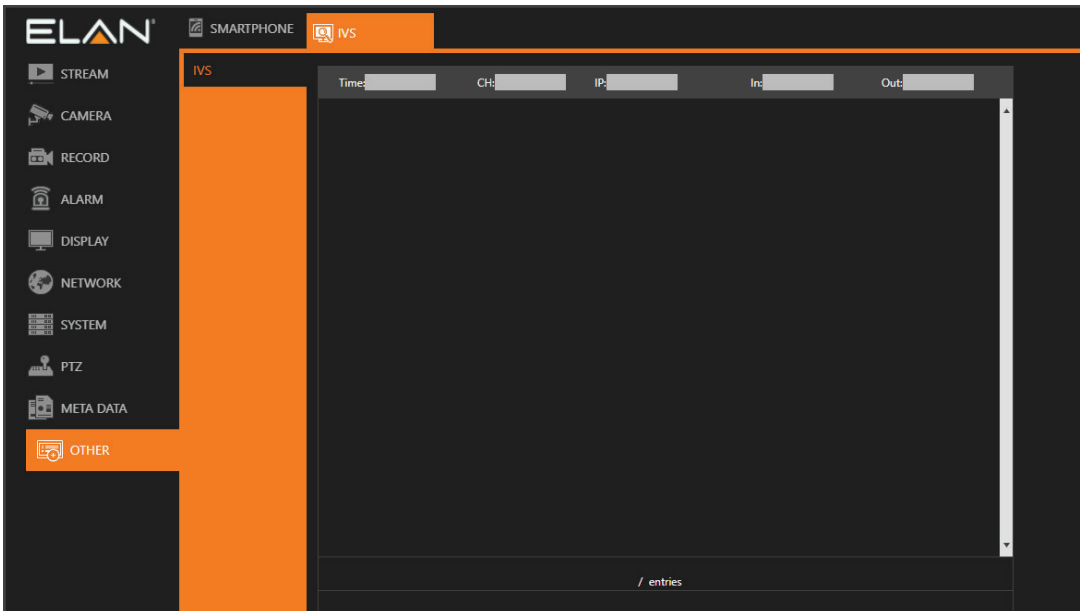
# OTHER SETUP

'Click' settings ( )to enter **NVR SETTINGS**, and 'press' **OTHER** ( ) in the left pane to enter the **OTHER SETUP** page. The setting options are described below:

## Other Setup > Smart Phone




## Other Setup > IVS



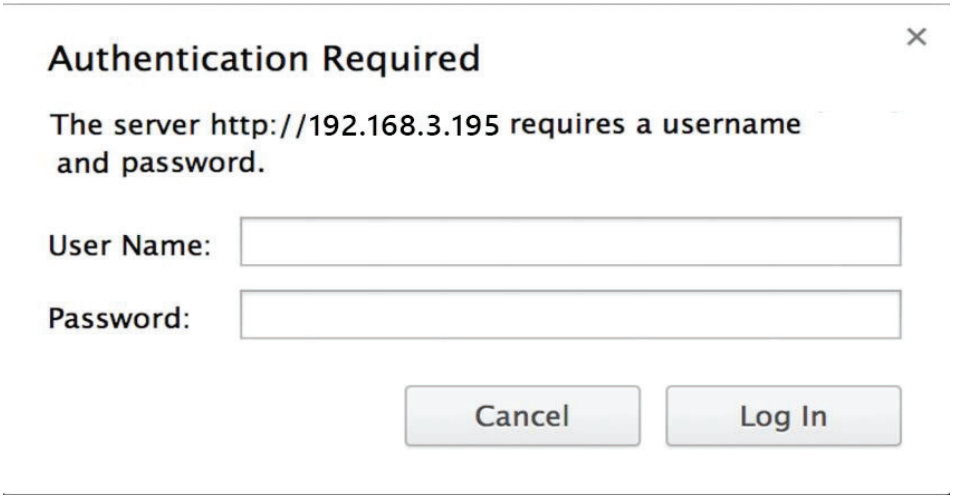

The NVR supports IVS-enabled cameras. Connect an IVS-enabled IP camera to the NVR and turn on the IVS function. Go to **ALARM SETUP > GENERAL > Alarm Input Type > IP Camera**, and the NVR will receive and record IVS information in the history table.

# STREAM SETUP

Once the network configurations are completed and cameras connected, you can remotely view live streams of cameras via an Internet browser, and access other functions, such as playing recorded video and backing up video files.

**Note:** IE 10 or above, or Chrome are recommended.


1. Enter the NVR IP address or domain name in the address bar:

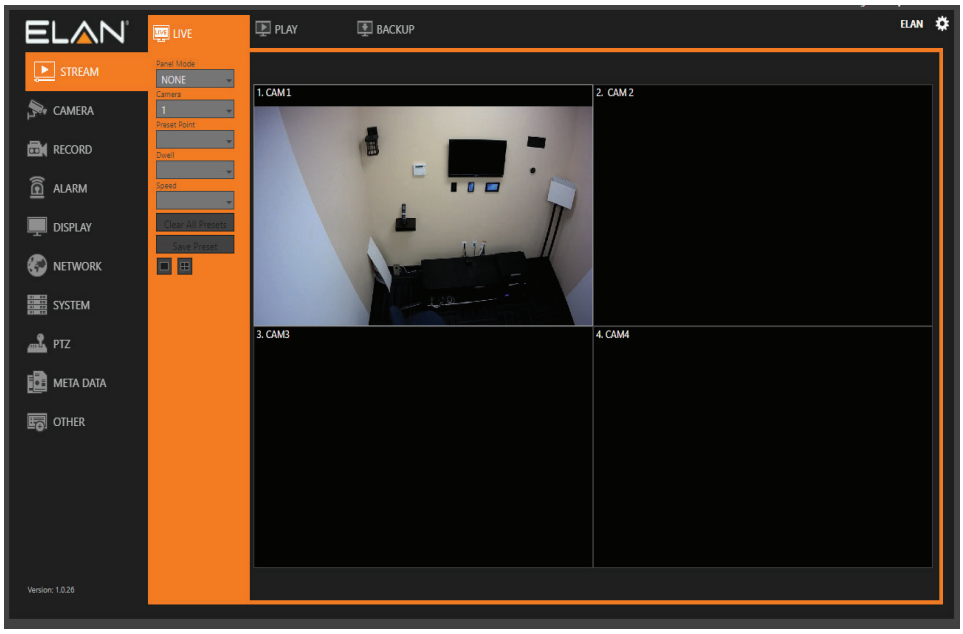



2. Log into the **STREAM** menu.

**Note:** NVR remote access requires corresponding access privileges.

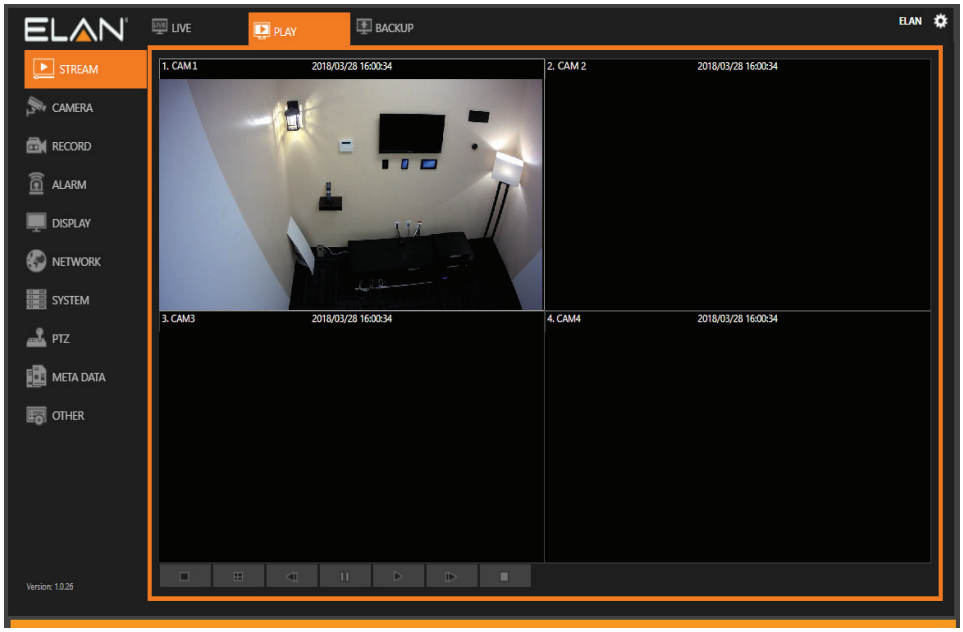
# STREAM SETUP (CONT.)

## Stream Setup > Live




The **LIVE** tab displays the streams of all connected cameras. With the control buttons and joystick you can control the movement of the selected camera if it has PTZ capabilities.

## Stream Setup > Play

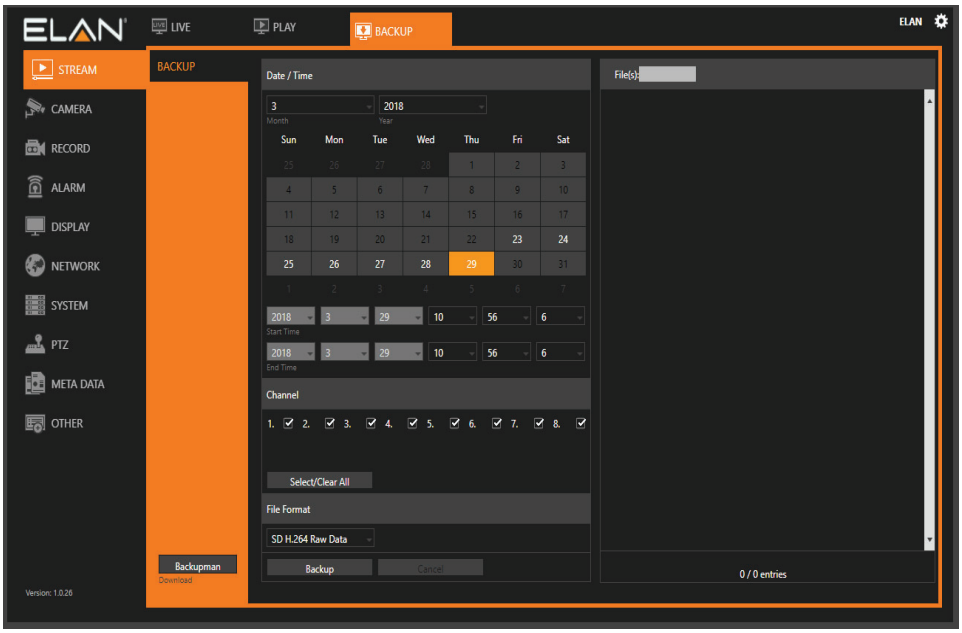



In **PLAY**, you can view recorded videos according to date/time, alarm/manual history table, and time line.

# STREAM SETUP (CONT.)

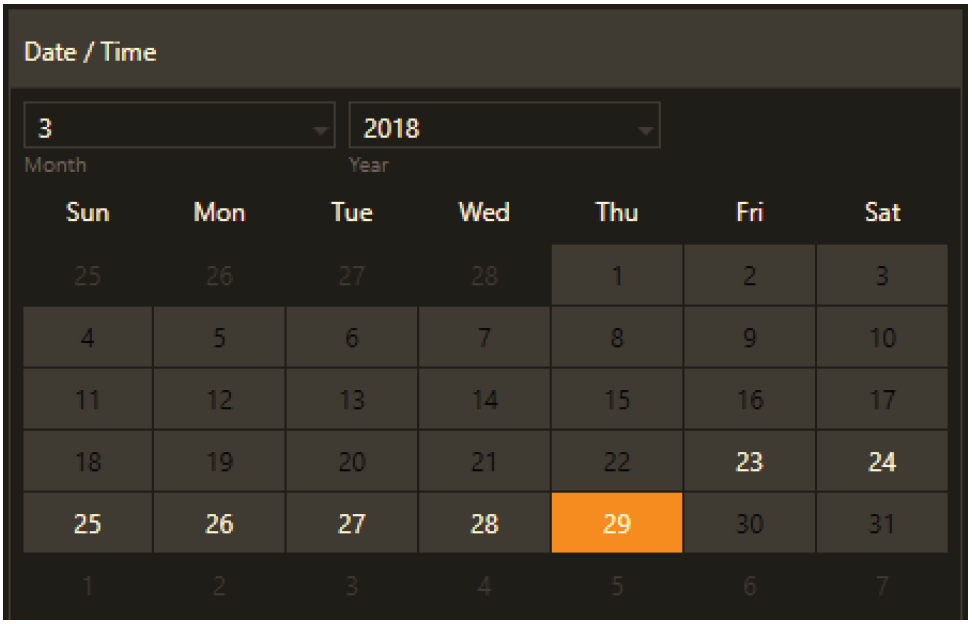
## Stream Setup > Backup

In **BACKUP**, you can back up recorded videos by choosing the Date/Time, Start Time/End Time, Channel, and File Format.




### Date/Time

Select the month, day, and year of the file clip you would like to export.

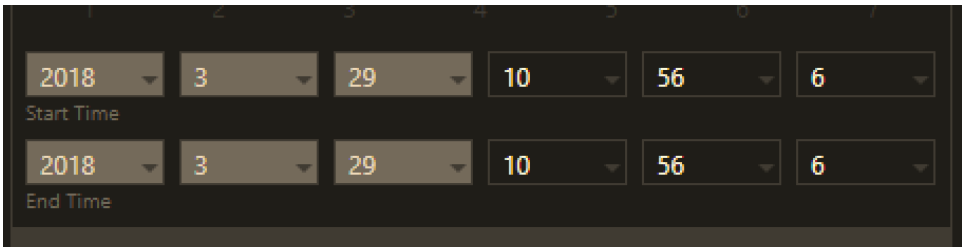


# STREAM SETUP (CONT.)

## Stream Setup > Backup

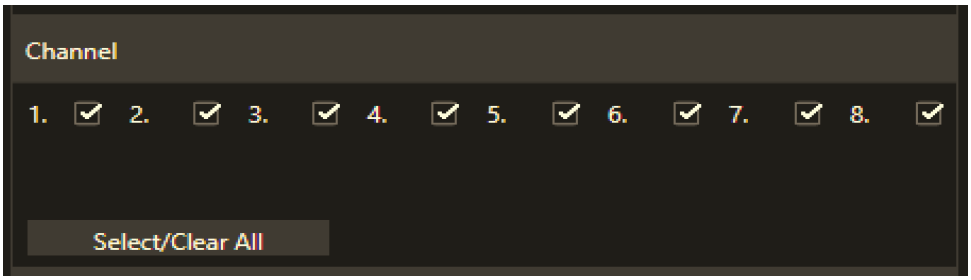
### Start Time/End Time

Select the time range you would like to export.



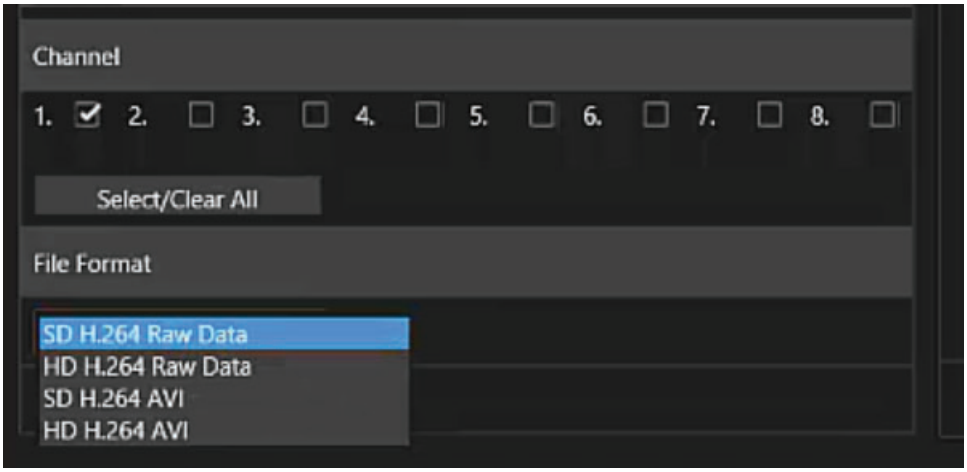

### Channel

Select the camera channels you would like to export.




### File Format

In the drop-down box, you are presented with 4 file format options.




Select a format, followed by 'clicking' on **Backup** to start the backup process.

# STREAM SETUP (CONT.)

## Stream Setup > Backup

### File Format Definitions:

- SD H.264 Raw Data

This option uses a *standard definition* proprietary file type which is locked and cannot be edited. This option will allow multiple channels to be displayed concurrently on playback but will require the backed up file to be played using 'Backup Manager'.

**Note:** 'Backup Manager' can be downloaded from the Backup screen on the NVR.

- HD H.264 Raw Data

This option uses a *high definition* proprietary file type which is locked and cannot be edited. This option will allow multiple channels to be displayed concurrently on playback but will require the backed up file to be played using 'Backup Manager'.

- SD H.264 AVI

This option will back up video using the .avi file format in *standard definition*. The .avi format is a generic video format that can be played back using generic media playback software such as VLC or the Windows Media player (If the correct codec is installed). This file format will provide each camera selected during the backup process as an individual .avi file.

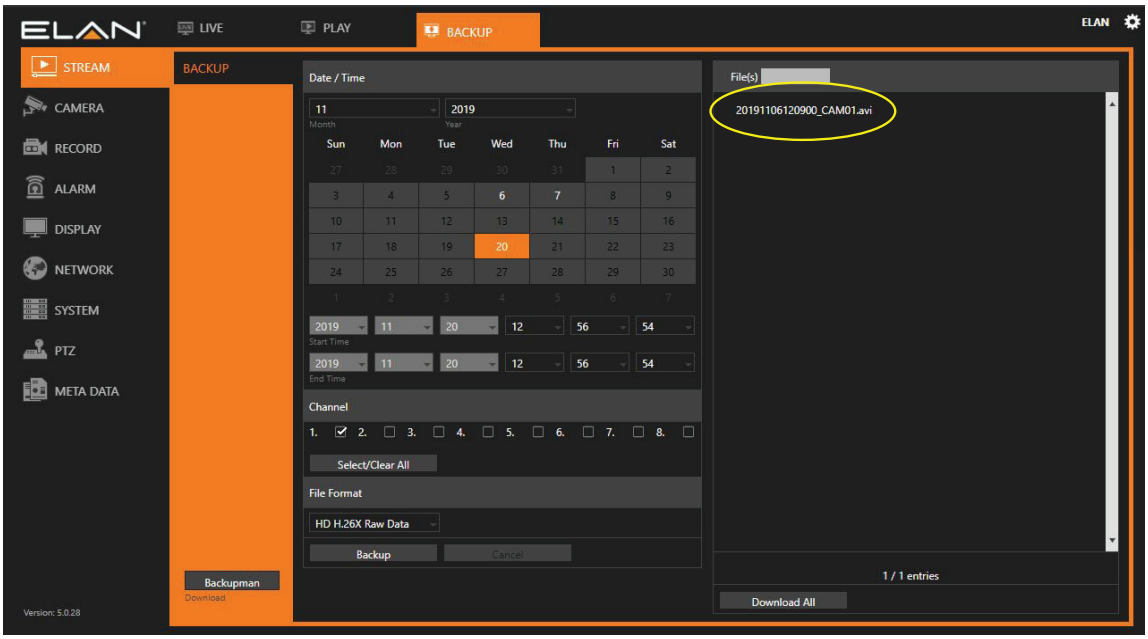
- HD H.264 AVI

This option will back up video using the .avi file format in *high definition*. The .avi format is a generic video format that can be played back using generic media playback software such as VLC or the Windows Media player (If the correct codec is installed). This file format will provide each camera selected during the backup process as an individual .avi file.

# STREAM SETUP (CONT.)

## Stream Setup > Saving Backup File

Once you ‘press’ the **Backup** button, a file is generated which will appear on the top right side of the screen.




‘Click’ on the filename and your web browser will download the file to your computer.

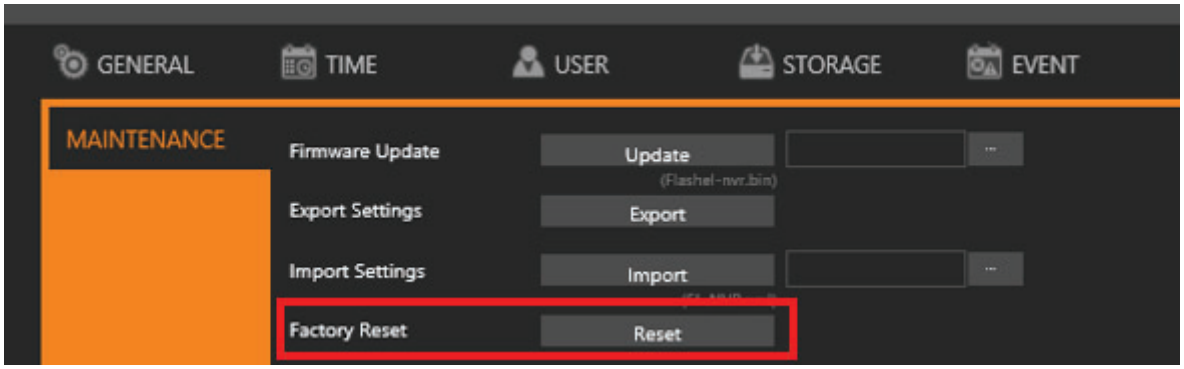
**Note:** If you exported a Raw data file, ‘press’ the **Backupman** button to download the proprietary Backupman player.

# APPENDIX

## Hard Reset

Perform the *hard reset* to restore NVR to the factory settings.

1. Navigate to **System**>**Maintenance**>**Factory Reset** through HDMI out to Monitor.




2. 'Click' **Reset** ( Reset ) to restart the NVR.

The device will restart and restore to the factory settings.

## Specifications

| EL-NVR-8CH Specification | |
|---|---|
| **IP Video Input** | |
| Supports | Network camera / ONVIF Profile S / DVR / NVR / Video encoder |
| Input | 8 CH |
| Resolution | CIF / VGA / D1 / 960H / 1M / 1.3M / 1080P / 3M / 5M / 4K |
| Maximum Frame Rate | 240 FPS |
| **Video Output** | |
| Output | HDMI / 4K / VGA 1080P |
| Spot monitor | HDMI or VGA selectable (Spot or sync.) |
| Split Screen | 1 / 4 / 8 split division, sequence mode, freeze |
| Digital Zoom | Up to 64× on live and playback |

| EL-NVR-8CH Specification | |
|---|---|
| **Recording** | |
| Encode Format | H.264 |
| Maximum Network Throughput | 48Mbps |
| Resolution | CIF ~ 4K |
| Frame Rate | Single channel up to 1080P 60 FPS |
| Recording Mode | Manual, schedule ( continuous, event, none ) |
| Recording Schedule | Each channel 7day × 24 hours time table, recording mode configurable |
| Alarm Event Actions | Network camera event / DI |
| Alarm Notification | Alarm notification iOS, android / E-Mail / FTP / buzzer / DO |
| **Playback** | |
| Search | Alarm event / Operation event / System event / Meta data event / Time search |
| Display | 8 CH synchronous playback |
| Resolution | CIF ~ 4K |
| Max. Frame Rate | Up to 1080P 60FPS |
| Speed | Fast rewind 2×~64× / Fast forward 2×~64× / Step Forward / Slow motion 1/2 ~ 1/16 |
| **Storage** | |
| Internal HDD | 1 × 3.5”HDD ( Up to 8TB supported ) |
| eSATA | eSATA connector × 1 (Up to 8TB external storage supported) |
| **Backup** | |
| USB Flash Disk | Up to 32 GB supported |
| Network Backup | Via HTTP / FTP / ELAN UI PC/Mac |
| **Audio** | |
| Audio Input | 8 CH ( network camera ), G.711 8K |
| Audio Output | RCA × 1 |

| EL-NVR-8CH Specification | |
|---|---|
| Network Camera Two Way Audio | Yes |
| **Network** | |
| Ports | RJ-45 Gigabit Ethernet |
| Protocols | ARP / TCP/IP / UDP / HTTP / HTTPS / SMTP / SNMP / FTP / DDNS / PPPoE / NTP / RTP / RTSP / DHCP/ Onvif Profile S |
| Web | Direct internet browser access / Multiple user access |
| Mobile Phone | iOS / Android supported |
| RTSP Service | RTP UDP/ RTSP TCP supported |
| **Software** | |
| Backup / Playback | Remote Playback Manager / Backup Manager, multiple NVRs file download and multi-channel playback |
| **Alarm** | |
| Ports | DI × 4 and DO × 4 (NO/NC) |
| **Accessories** | |
| PTZ Protocols | HTTP / ONVIF |
| USB to RS-232 | Record external metadata via USB to RS-232 cable, display at live and playback |
| Microphone | USB Mic. support |
| **Power and Working Environment** | |
| Power | Adapter DC 12V, 5A, 60W × 1 |
| Operating Temperature | 0°C ~ 45°C |
| Operating Humidity | 5% ~ 80% |
| Dimension (W×L×H) | 205x139x72 mm (without bracket)<br>241.3x167.6x73.5 mm (including bracket) |
| Weight | ≈1.3 kg (without hard drive) |