

ALIBI™ Embedded Network Video Recorder Firmware V4.1.50 User Manual

Products: ALI-NVR3308P, ALI-NVR3316P, ALI-NVR5216P, ALI-NVR5232P, ALI-5316P, ALI-NVR7132R and ALI-NVR7164R recorders



PLEASE READ THIS MANUAL BEFORE USING YOUR SYSTEM, and always follow the instructions for safety and proper use. Save this manual for future reference.

About this manual

This user manual applies to all ALIBI embedded Network Video Recorders (NVRs) with firmware version V4.1.50.

Navigation in the firmware is represented by the expression: "Menu | Configuration | Network | TCP/IP", which means:

- a. Click the **Menu** icon in the upper left corner of the Live View display to open the Menu screen.
- b. In the Menu screen, click the **Configuration** icon.
- c. In the Configuration menu, click the **Network** entry in the left frame.
- d. Click TCP/IP. TCP/I{P may be a submenu under Network, or a tab at the top of the screen. This may also indicate a parameter on the screen.

To find the version of the firmware installed in your NVR, open the **Menu | Maintenance | System Info | Device Information** screen and find **Firmware Version**.

Some features described herein may apply to some NVRs but not to other models. For specific information about the features and capabilities of your ALIBI NVR, please contact your vendor.

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NOTES

SECTION 1 Systems Overview

Congratulations on purchasing your new Embedded NVR security system! Your system includes the following key features:

General

- · Connectable to network cameras, network dome and encoders
- Connectable to the third-party network cameras like Acti, Arecont, Axis, Bosch, Brickcom, Canon, Panasonic, Pelco, Samsung, Sanyo. Sony, Vivotek and Zavio, and cameras that adopt ONVIF or PSIA protocol
- Connectable to smart IP cameras
- H.265+ / H.265 / H.264+ / H.264 / MPEG4 video formats
- PAL / NTSC adaptive video inputs
- Each channel supports dual-stream
- Up to 8 / 16 / 32 / 64 network cameras can be added according to model
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc.
- The quality of the input and output record is configurable

Local Monitoring

- HDMI / VGA1 and HDMI2 outputs provided
- HDMI video output at up to 4K resolution
- Multi-screen display in live view is supported, and the display sequence of channels is adjustable
- Live view screen can be switched in groups. Manual switch and auto-switch are provided and the auto-switch interval is configurable
- Custom window-division live view layout configuration
- 3D positioning in live view
- · Configurable main stream and sub-stream for the live view
- Quick setting menu is provided for live view
- POS information overlay on live view
- · Motion detection, video tampering, video exception alert and video loss alert functions
- Privacy mask
- Multiple PTZ protocols supported; PTZ preset, patrol and pattern
- · Zooming in by clicking the mouse and PTZ tracing by dragging mouse

HDD Management

- Up to 16 SATA hard disks and 1 eSATA disk can be connected for some recorders
- Up to 8 TB storage capacity for each disk supported (refer to the specifications for your recorder for hardware capabilities)
- 8 network disks (NAS / IP SAN disk)
- S.M.A.R.T. and bad sector detection
- HDD group management

SECTION 1: SYSTEM OVERVIEW

- Supports HDD standby function
- HDD property: redundancy, read-only, read / write (R / W)
- HDD quota management; different capacities can be assigned to different channels
- RAID 0, RAID 1, RAID 5, RAID 6 and RAID 10 are supported
- Hot-swappable RAID storage scheme can be enabled and disabled upon demand for some recorders. Up to 16 arrays can be configured
- Disk clone to the eSATA disk
- HDD health monitoring

Recording, Capture and Playback

- Holiday recording schedule configuration
- Continuous and event video recording parameters
- Multiple recording types: manual, continuous, alarm, motion, motion | alarm, motion & alarm VCA, and POS
- · Eight recording time periods with separated recording types
- POS information overlay on image
- · Pre-record and post-record for alarm, motion detection for recording, and pre-record time for schedule and manual recording
- · Searching record files and captured pictures by events (alarm input / motion detection)
- Tag adding for record files, searching and playing back by tags
- · Locking and unlocking record files
- · Local redundant recording and capture
- Normal / Smart / custom video playback mode
- Playback by video synopsis
- Searching and playing back record files by channel number, recording type, start time, end time, etc.
- Supports playback by main stream or sub stream
- Smart search for the selected area in the video
- · Zooming in when playback
- Reverse playback of multi-channel
- Supports pause, play reverse, speed up, speed down, skip forward, and skip backward when playback, and locating by
 dragging the mouse
- · Supports thumbnails view and fast view during playback
- Up to 16-ch synchronous playback at 1080p real time
- Supports playback by transcoded stream
- · Manual capture, continuous capture of video images and playback of captured pictures
- Supports enabling H.264+ to ensure high video quality with lowered bitrate

Files Management

- · Search and export vehicle detection files and human appearance files
- Export video data by USB, SATA or eSATA device
- Export video clips when playback
- Either Normal or Hot Spare working mode is configurable to constitute an N+1 hot spare system

- Alarm and Exception
- Configurable arming time of alarm input / output
- Alarm for video loss, motion detection, tampering, abnormal signal, video input / output standard mismatch, illegal login, network disconnected, IP confliction, abnormal record / capture, HDD error, and HDD full, etc.
- POS triggered alarm
- · VCA detection alarm is supported
- Smart analysis for people counting and heat map
- Connectable to the thermal network camera
- · Alarm triggers full screen monitoring, audio alarm, notifying surveillance center, sending e-mail and alarm output
- · Automatic restore when system is abnormal

Other Local Functions

- Operable by front panel, mouse, remote control, or control keyboard
- Three-level user management; admin user is allowed to create many operating accounts and define their operating
 permission, which includes the limit to access any channel
- · Admin password resetting by exporting / importing a GUID file
- Operation, alarm, exceptions, and log recording and searching
- Manually triggering and clearing alarms
- Import and export device configuration information

Network Function

- Two self-adaptive 10M / 100M / 1000 Mbps network interfaces
- IPv6 is supported
- TCP/IP protocol, DHCP, DNS, DDNS, NTP, SADP, SMTP, NFS, and iSCSI are supported
- TCP, UDP and RTP for unicast
- Auto / Manual port mapping by UPnPTM
- Support access by Alibi Connect
- Remote Web browser access by HTTPS ensures high security
- ANR (Automatic Network Replenishment) function is supported, which enables the IP camera to save the recording files in the local storage when the network is disconnected, and synchronizes the files to the device when the network is resumed
- Remote reverse playback via RTSP
- Supports accessing the platform via ONVIF
- Remote search, playback, download, locking and unlocking of the record files, and supports downloading files upon broken transfer resume
- Remote parameters setup; remote import / export of device parameters
- · Remote viewing of the device status, system logs and alarm status
- · Remote keyboard operation
- Remote HDD formatting and program upgrading
- Remote system restart and shutdown
- RS-232, RS-485 transparent channel transmission

SECTION 1: SYSTEM OVERVIEW

- · Alarm and exception information can be sent to the remote host
- Remotely start / stop recording
- Remotely start / stop alarm output
- Remote PTZ control
- Remote JPEG capture
- Virtual host function to access and manage the IP camera directly
- Two-way audio and voice broadcasting
- Embedded Web server

1.1 Soft keyboard

One of two on-screen keyboards appears when you click in a field that accepts a entry, such as a password or name or a numerical value. A third keyboard which includes symbols can also be opened while in the numeric keyboard. The alphanumeric keyboard is shown in the following picture. Some control keys toggle their function when they are clicked. A numerical keyboard, shown beneath, appears for numerical entries such as an IP address.







Soft keyboard - symbols

A USB keyboard attached to the recorder has limited functionality. It can be useful for entering text and numbers.

SECTION 2 Basic System Setup

When the NVR is first powered on, or reset to its Factory default configuration, It is in an "Inactive" state, which means that it is not it doesn't have an *admin* user password for the recorder or cameras, and it is not configured to record video or log system status messages. The initial configuration screen enables you to activate the recorder.

After activating the recorder and configuring its security options, a configuration Wizard will open. The Wizard helps you to easily configure the recorder for its basic settings, including date and time, network configuration, network cameras, HDD initialization, etc.

After completing system setup with the Wizard, the recorder will record video continuously from all cameras. Additional configuration setup will allow you to customize the system for your needs and operate more efficiently.

2.1 System activation

1. Power on the NVR. Normally, an Alibi logo splash screen appears within 2 minutes. The following screen is used to activate the recorder.

Indrain Create Here Password Contron Here Password - Super OWD - Super OWD - Super OWD - Super Own - Super Contron Configu. - Create Channel Default Password Role Salat password Partial Password Role Salat password Partial Password	ni Thu can ercsa, From Kan

In the screen above:

a. Click on the Create New Password field, and then enter a unique password using the pop-up virtual keyboard. Follow the guidelines in the Note at the bottom of the screen. Always use a password that will produce a "Strong" rating (green indicator in the status bar).

4	5	6	-	:
7	8	9	1	G
•	0	#+=	<	
ABC	-	0 D	<	4
********				-

- b. Enter the same New Password in the Confirm New Password field.
- c. Select or deselect the checkboxes to:

Export GUID: This feature enables you to create a GUID file and save it to a flash drive for logging back into the NVR if you loose your *admin* password.

Enable Unlock Pattern: This option allows you to login by dragging the mouse across a 3 x 3 matrix to quickly login to your admin account.

Security Question Configuration: If you loose your password, this option enables you to login by responding correctly to security questions you setup.

- d. Enter a password in the **Create Channel Default Password** field. This will become the default password of the *admin* user of cameras plugged into the internal switch on the backpanel of the NVR. Follow the guidelines in the **Note** below this field.
- Click the OK button to continue. If passwords were setup properly in the Activation menu, an Note window will appear showing the NVR is now "activated." Leave the Note window open.



3. If you selected options in the Activation screen for Export GUID, Unlock Pattern and Security Question, use the instructions in this step to configure those features.

Export GUID: If you selected this option, plug a flash drive into an unused USB port on the recorder, and then click **OK** in the **Note** window (see above).

a. In the GUID Import/Export window, open the Device Name drop down list and then select the device you where you want to save the GUID file. If a list of directories appear, click on the directory you prefer (in the window shown below, the first directory was selected), and then click Export. Some options will appear at the bottom of the screen to manage the storage device.

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Device ria	054		ann L	NGR.	492111	2002.03	120
Name	51	1	Ту.	1	Edit _	1 0	
- 1						×	
- IC			Fill		05-1		
·			F		10-1		
- 1			F		06-1	*	
= 18.			F		01-0	*	
= 10	_	_	F	_	09-0	*	
New Fold	10	(rat			ree Space	1328.0	IOMO
					E-mark	Ra	

SECTION 2: BASIC SYSTEM SETUP

b. After the export operation completes, remove the flash drive from the NVR and store it in a secure location.

Enable Unlock Pattern: If you selected this option and the Note window shown above is still open, click OK to close the Note window. Then:

a. Drag the mouse over four of the dots in the matrix shown below to construct an "Unlock" pattern (see right window below). Use this pattern to log into your NVR in the future as the *admin* user.



Security Question Configuration: If you selected this option and the Note window shown above is still open, click OK to close the Note window. Then:

a. Open the drop down list in the **Question 1** field, and then select the question you want to use.

Security Question	Configuration	×	Security Question	Configuration	×
Question 1	1. Your father's name.		Question 1	1. Your father's name	
Answer 1			1. Your father's nam	10	
Question 2 Answer 2	2. Your mother's name		2. Your mother's na 3. Your servor class 4. Your junior class	me. Itescher's name. Itescher's name.	
Question 3	3. Your senior class teacher's -		5. The name of the r	roommate you most familiar with.	
Answer 3			7. Your favorite cele	brity.	
			8. Your favorite auto	mobile brand.	
			9. Your favorite gam		
	100	Cancel	10. Your favorite boo	ok.	Caucal

- b. Enter your answer to Question 1 in the **Answer 1** field.
- c. Repeat the same setup for Question 2 and Question 3, and then click OK.
- d. Remember or write down the exact answers you entered, and then save it in a secure location.
- e. Click **OK** to save your configuration.

2.2 Using the setup Wizard

Next, the configuration Wizard Date ad Time Setup menu will open. Since all recordings made by your surveillance system
are time stamped, It is very important that the date and time is set precisely to produce valuable evidence from your recorder.

	Terre Solar	Setup	Hard Dete	Setup	Access	Password and Ports	
Date and Tim	e Setup			27.03/10/07			
Time Zone	(GMT-06.00) Central Te			Enable NTP			
Date Format	MM-DD-YYYY	(e)		Interval (min)	00		
System Date	09-13-2018	202		NTP Server			
System Time	10.28.41	۲		NTP Port	12	0(:	

In the screen above:

- a. Select the local **Time Zone** and **Date Format** using the drop down menus.
- b. Click the System Date field, and then click on the current date.
- c. Click the System Time field, and then use the graphical interface for setting the current time. You can also check the Enable NTP box, and then enter the appropriate parameters in the fields below it to configure the recorder retrieve the precise time and date information from a timeserver on the Internet.
- d. Click Next to save your settings and continue.
- 2. In the Network Setup Wizard window, click the field value you want to change, then use the pop-up aid to enter a new value. By default, the NVR uses DHCP (Dynamic Host Configuration Protocol) to acquire compatible (dynamic, changeable) network settings from a network DHCP server (usually a router). You can leave the settings on this menu unchanged, but it is configure the NVR with a fixed network settings to assure the NVR has an unchanging IP address, which is convenient for remote login.

					and Pa	arts		
Network Setu		2	Easter Old P					
Enable Ottai			Put Address	183	100		87	
Preferred DN	102.100.0.1		Pvil Subnet Ma	ak 255	255	266	120	
Attemate DN			Pv4 Default Ox	berway 102	100		11	
		1	Internal NIC IPv	4 Ad., 103	. 160	254	.1	

SECTION 2: BASIC SYSTEM SETUP

- a. In the Wizard 2 Network Setup window, nothing usually has to change in the left column. You can enter your preferred DNS server addresses (optional, ex. 8.8.8.8 and 8.8.4.4 [Google] DNSs) in the Preferred .. and Alternate DNS fields.
- b. The column on the right shows that the Enable DHCP box is checked (by default) and the recorder acquired network settings from a DHCP server. These settings are compatible with your network and the other devices that share it. To enable fixed network settings, un-check the Enable DHCP box. Then you can either use the IPV4 parameters assigned by the DHCP server, or enter your preferred IPV4 parameters (IPv4 Address, IPv4 Subnet Mask, IPv4 Default Gateway). NOTE: If you enter IPV4 parameters in the fields above, ensure that they do not conflict with other devices in the network.
- c. Click **Next** to save your settings and continue.
- 3. In the Wizard 3 Hard Disk (HDD) menu, the HDDs installed in the recorder are listed, showing their Capacity, Status, Free Space, etc. Usually HDDs will show a Normal status. If any HDD shows an Uninitialized status, it must be initialized (Init) before it can be used. The screen below shows a single HDD system with Normal Status and maximum Free Space

	•	2	(3)	- (4) -	(6)	6	
	Date and Tene Setup	Network Setup	Heref Deen	Camera Setup	Platform Access	Change Password and Ports	
Hard Disk							
	Label	Capacity	1 54	etus.	Property	Type	Free Space
	1.	1863.0206	14	etroi	RIMU	Local	1038.00040
							in the second

If any HDD listed shows a status of Uninitialized (see screen below) it must be initialized (Init) to restore it to a usable condition. **NOTE**: The initialization process erases all data on the disk.

	Date and Tene Setup	2 Network Setup	least teas	4 Camera Setup	5 Platform Access	6 Change Password		
						and Ports		
Hard Disk								
-	Label	Capacity	1 54	atus	Property	Type	Fre	е Брасе
	1.	1863 02018	- 04	instalization (RINV	Local	OM	1
								init

To Initialize an HDD:

- a. Check the select box for the HDD(s) you want to initialize.
- b. Click the **Init** button.
- c. Wait for the operation to complete (this could take several minutes), and then click Next to continue.
- 4. In the Wizard 4 Camera Setup menu, you can select add cameras discovered on the local network to your surveillance system. Most recorders have a limit of how many network cameras can be added to the system. You can also use the recorder to Activate cameras on the network. A camera must be activated before it can be added.

Cam	Date and Time Setue era Setup	Network Hart Entup	r Desk	Platon Platon Acces	m Change es Password and Ports		
Cam	era Setup						
	IR Address	I. Bernelle	1 Anton	Denice Mode	d Distant	Marca 1	Colored March
-	192,160,6.15	G Active	1	ALLEPV503	ALIEI	8000	265 265 265 0
	10.1.10.23	· Active	0	ALHPV508	ALIEI	8000	255 255 265 0
	192.160.3.6	S ALBIE	0	ALENP301	AUB	0000	255 255 255 12
1000	192.160.6.4	· Active	0	ALL-NP301	AUBI	8000	255 255 255 0
	10.1.10.25	· Active	0	ALI-NS2028	R ALIBI	8000	255 255 255 0
	192.168.6.8	 Active 	0	ALI-NS4018	R ALIBI	8000	255 255 255 0
- Eni	ible H 205 (For Initial A	ccess)			+ 400	C Search	P Activate

To **activate** a network camera with the NVR:

- Click the Search button to discover the cameras attached to your local network (network to which the recorder is attached).
- Scroll through the list of cameras found on the local network, and then check the select box for the cameras you want to activate.
- c. Click the Activate button. Allow the operation to complete before continuing.

To **add** a network camera to the NVR:

- Click the Search button to discover the cameras attached to your local network (network to which the recorder is attached).
- Scroll through the list of cameras found on the local network, and then check the select box for the cameras you want to add. See above.
- c. Click the Add button. Allow the operation to complete before continuing.
- 5. In the Wizard 5 Platform Access menu, you can setup Platform Access, enable DDNS, and/or configure Stream Encryption.

	•	2 3	- •	5 6	
	Date and Time Setur	Network Harst Dis Setup	k Camera Setup	Change Password and Polts	
Platform Acces	IS AND Company		Warmen Street Frank	12	
Access type	And Connect		Enable Organi Ere		
Enable			Ventization Code/E		
Server Address	www.albiconnect.cor	it: Custom	Glabus	Office	
Enable DONS					
DONS Type	NO-IP				
Derver Adar	dynupidate no-sp.com				
Device Do.					
User Name					
Paspeord					

Platform Access is used with the Alibi Witness 2 smartphone app to simplify access and control how others can access the system. To enable Platform Access for your recorder, check the **Enable** box (see the screen above). Then follow the on-screen instructions for activating this service. Refer to the **Alibi Witness 2** user documentation for instructions on using the platform access feature.

Enable DDNS enables DDNS (Dynamic Domain Name System) access to the recorder. This feature simplifies access to the recorder, especially when the IP address of the recorder may change. For more information on setting up a DDNS service for the recorder, refer to firmware user manual for the recorder. You can download the firmware user manual for your recorder from *AlibiSecurity.com/resources*.

Enable Stream Encryption. Stream encryption enables to encrypt the streams for live view, playback, download, backup, etc. To use stream encryption:

- a. Check the Enable Stream Encryption select box.
- b. Create an encryption password.



The stream encryption password is synchronized with the Alibi Connect service verification code. After enabling the encryption code, the Alibi Connect stream will be forcedly encrypted. Make sure your Alibi Connect service supports stream encryption.

6. In the Wizard 6 Change Password and Ports menu, you can modify your *admin* password and change the Server, HTTP and RSTP port numbers. Alibi Support recommends that you change these port numbers for stronger security.

	•	2	- 3	- •	6	- (6)		
	Date and Time Setup	Nebwork Setup	Hard Disk	Camera Setup	Platform Access	Change Paramont and Parks		
Change F	Password and	Ports Set	up					
New Admin	Password				Server Port	80	00	
					HTTP Port	80		
					RTSP Port	10	50	

To change the password, check the **New Admin Password** box, and then follow the on screen instructions.

To change the port numbers, enter the new port numbers in the field provided.

To save your settings and exit the configuration Wizard, click **Finish**. Click **Previous** to return to an another Wizard menu. After clicking Finish, the Live View window will open.

	• • ALIBF	• ALIBI	• ALIBI"
O ALIBI	O ALIBF	O ALIBI [™]	• O ALIBI"
• • ALIBI	• • ALIBI	• ALIBI	O ALIBF
O ALIBF	O ALIBI	G ALIBI	O ALIBE

2.3 PoE channel configuration

Setup the PoE (Power over Ethernet) configuration as you add cameras to the internal switch ports on the back of the NVR. With this featuere, you can disable PoE power on ports, and configure ports for long distance (extended) Ethernet reach.

The NVR monitors power consumption on each port of the internal Ethernet switch. This information is displayed by opening the **Menu | Camera | Camera | POE Configuration** screen.

		Extended PoE f	eature	PoE pov	ver used by p	ort	
1			Came	əra		æ ±	ധ
156	Camera ~	PoE Power Configurati	n Enable/Disable F 3 SW: Remaining	PoE PNP			0
	Poli Chimiel	Channel	Long Distance	Short Distance	Channel Status	Actual Power	1
1	8 8	DI		•	Connected	5.2W	
0	Display Configu	D2		•	Connected	8.3VV	
.	Privacy Mask	D3		*	Disconnected	0.0VV	
24		D4			Disconnected	0.0///	
-	Video Parameters?	D5		•	Disconnected	0.0VV	
		DB		•	Disconnected	0.0VV	
	Event >	D7			Disconnected	0.000	
		D8			Disconnected	0.0VV	
		D9			Disconnected	0.074	
		D10		*	Disconnected	0.000	
		D11			Disconnected	0.000	
		D12			Disconnected	0.000	
		D13		•	Disconnected	0.0//	2
		D14			Disconnected	0.054	

The display shows the real power consumed and the remaining power available for other ports.

Long Distance (Extended) PoE Power

Long distance PoE allows a maximum power of 7.5W with a maximum main stream and sub-stream combined bitrate of 6 Mb/s. To enable Long Distance PoE Power on a camera channel:

 Click on the camera channel to extend, then click icon for that channel in the Long Distance column. In the example below, the Long Distance icon for camera channel D5 was selected.

Gà.	Camera 💛	PoE Power Configurat	tion Enable/Disable P	DE PNP		
	IP Camera	Actual power	13.4VV. Remaining	power: 186.0VV.	0%	
	Poli Charnel	Channel	Long Distance	Short Distance	Channel Status	Actual Power
		DI			Connected	5.1W
0	Display Configu	D2			Connected	8.3VV
_ (12000202	D3			Disconnected	0.0VV
-	Privacy Mask	D4			Disconnected	0.0///
-	Video Parameters>	05				
		D6		*	Disconnected	0.0VV
	Event >	D7			Disconnected	0.000
		DB			Disconnected	0.0VV
		00		-	Disconnected	0.0VV
		D10			Disconnected	0.0VV
		D11			Disconnected	0.0VV
		D12			Disconnected	0.000
		D13			Disconnected	0.0//
		1014			Disconnected	0.000

2. Click **Apply** to save your settings.

Disable PoE power on a channel

You can disable PoE on channels for cameras that do not use it.

You can also disable PoE on a camera channel, and then attach a switch where additional cameras, such as wireless cameras, are connected. If using this configuration, you cannot exceed the channel capacity of your NVR.

To disable PoE power on a camera channel:

1. Open the Menu | Camera | Camera | PoE Configuration | Enable/Disable PoE PnP screen.

		amera	
Ca Camera V	PoE Power Configuration Enable/Dis	able PoE PnP	
IP Camera	Enable	Camera Norve	
2002200	1 1 1 K	DI	
		D2	
3 A	1	DB	
Display Configu			
Privacy Mask	- 1	DS	
	2	D6	
C Video Parameters?	2	D7	
III from	×	DB	
(III) revent	*	D9	
	2	D10	
		DII	
	1	D12	
	2	D13	
	×.	D14	
	2	D15	
		P.10	
	Apply		

- 2. Click on the channel where you want to disable PoE, and then click the **Enable** box to **uncheck** it.
- 3. Click Apply to save your settings.

2.4 Basic camera setup

Several customization options are provided for configuring your cameras to function most effectively. Camera menus, and other configuration options, are available through the Menu screen. To open the Menu screen:

1. Right click anywhere in the Live View screen shown above. An live view utility screen will open.

SECTION 2: BASIC SYSTEM SETUP



The Menu screen will open.



To open a segment of the firmware to configure, click the appropriate icon in the **Menu** screen. Refer to the firmware user manual for your recorder for specific instructions on how to use the **Menu** screen.

2.5 Customize camera configurations

NOTE Options shown in the menu for cameras may change based on the model of camera used.

The **Camera** menu lists all cameras configured in the NVR, and shows the channel, name, timestamp, etc. of each. Using this menu, you can assign names to each camera for easy recognition, select areas for motion detection and privacy blocking, and configure alarm features (if supported by the camera). To customize the configuration settings of each camera, do the following:

1. In the Menu screen, click the Camera icon.



1. In the **Camera** menu, click the link for **Display Configu** in the left frame.

	12000			
ij Camera 🖻	Camera	[D1] MD49-3013-04		
Display Configu	Camera Name	ALI-NP3013RH	OSD Settings	~
			 Display Name 	
Privacy Mask	110000		Display Date	
Meteo Davamaters 1		and the set of a	Display Week	
The second secon	and the second		Date Format	MM-DD-YYYY *
Event >	Saul and	a final state of the second state	Time Format	YYYYY-MM-DD
	100 ANY 10 AT		Display Mode	MM-DD-YYYY
			QDD Fort	DD-MM-17777
			Image Settings	YYYYMMACD ,
	and the second s		Exposure	MARTING
			Day/Night Switch	NAME OF A DESCRIPTION O
			Backlight	DDMMMmm
			Image Enhanceme	nt >
			White Balance	3

2.5.1 Camera OSD setup

You can configure the OSD Settings (On-Screen Display) settings for the camera, including date, time, day of week, camera name, etc. OSD options you select will be permanently embedded in the recorded video for your camera.



1. In the Display Configuration menu, click the expand-more icon on the OSD Settings line to open the OSD menu.

. 🗉	Camera	¢	4 U	
Ciji Camera > Ciji Diselity Contegu Ciji Provacy Mask Ciji Video Parameters>	Carrera (D1) ALARPOD1364 - Carrera Name ALARPOD1364	OSD Settings Cligitaly Name Display Date Display (Week Date Format Mith OD-YYYY	~	– expand- more icon
Event >		The Format 24-hour Display Mode Non-Transparent & Q2D Ford 16x16 Image Settings	kl - >	
		Exposure	>	
		Day/Night Switch	>	
		Backlight	3	
		Image Enhancement	>	
		White Balance	5	
	Audio			

 Open the Camera drop-down list and select the camera you want to configure. In the screen below, camera (D1)ALI-NP3013RH is selected.

				Camer	1		
6 C	amera	×.	Camera	(D1) ALI-NP3013RH ·			
. 15	onlay Contrast		Camera Name	ALL-NP3013RH	OSD Settings		×
	and the second second	_			> Display Name		
Pr	wacy Mask		1 and 1		Display Date		
					E Display Week		
09	deo Parameter	ra->_	and the second	the second second	Date Format	MM4-DID-YYYYYY	
-	ent	- 52	Sec. 2	a presente a contra -	Time Format	24-hour	
				and the second	Display Mode	Non-Transparent & 1	•
			-		COD Fort	10-10	
					Image Settings		>
					Exposure		>
					Day/Night Switch		>
					Backlight		
					Image Enhanceme	nt	>
					White Balance		

- 3. In the OSD menu, check the select boxes for the information you want to appear on the screen, such as camera name, date and/or week. Information you selected will appear in the text boxes shown in the video window.
 - a. If you selected **Display Name**, enter the name of the camera in the **Camera Name** field near the top of the window.
 - b. For other items you selected, open the drop down lists for the Date/Time Format, Display Mode and OSD Font as needed and select the best choice for your camera.
 - c. Drag the text boxes to the best locations in the camera field of view.
- 4. Click **Apply** to save your settings.
- 5. Repeat sub-steps **2** through **4** above for each camera managed by the NVR.

2.5.2 Camera Image Settings





- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- 3. Adjust the sliders for the Brightness, Contrast and Saturation to produce the best image.
- Open the drop down lists for Enable Rotation, Mirror Mode and Scene Mode, then select best option for each for this camera installation.
- 5. Click **Apply** to save your settings for this camera.
- 6. Repeat sub-steps 2 through 5 above for each camera managed by the NVR.

2.5.3 Camera Exposure setup

1. In the **Display Configu**ration menu, click the **expand-more** icon on the **Exposure** line.



SECTION 2: BASIC SYSTEM SETUP

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- Open the Exposure Time drop down list, and select the optimal exposure time for the camera (1/100000 to 1 second). Larger exposure time produces a brighter image.
- Open the Iris Mode drop down list, and select either Auto or Manual. Auto opens a slider for setting the Auto Iris Level (1... 100).
- 5. Click **Apply** to save your settings for this camera..
- 6. Repeat sub-steps 2 through 5 above for each camera managed by the NVR.

2.5.4 Camera Day/Night Switch

Use the camera Daylight Switch menu to control how the camera employs IR to respond to low ambient light (night) conditions.

1. In the **Display Configu**ration menu, click the **expand-more** icon on the **Day/Night Switch** line.

	Camera	¢ ځ	C
Camera > Image: Comparison of Comparison o	Carrera [D1] ALJAND3015994 • Carrera Name ALSAN20013904	OSD Settings > Image Setings > Exposure > Day/Right Set. ~ Day/Right Set. Add - Sensibility 6 Gmart Suppl. Disable Disable	expand more icon
		Backlight >	
		Image Enhancement. >	
		White Balance	
	Aggar	Image Enhancement > Vhite Balance >	

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- Open the Day/Night Switch drop down list and select the best option for the camera. Options include: Day, Night, Auto, Auto-Switch, Triggered by Alarm Input. Depending on the option you select, related parameters will be presented. Configure the parameters before continuing. NOTE: The difference between Auto and Auto-Switch is described below.

Auto: The camera automatically switches between day mode and night mode according to the illumination. The sensitivity ranges from 0 to 7, and higher sensitivity more easily triggers the mode switch. The switch time refers to the interval time between the day/night switch. You can set it from 5 sec to 120 sec.

Auto-Switch: The camera switches the day mode and the night mode according to the start time and end time you set.

- 4. Click Apply to save your settings for this camera.
- 5. Repeat sub-steps 2 through 4 above for each camera managed by the NVR.

2.5.5 Camera Backlight setup

Backlight settings control the camera's dynamic range. Use this feature when the surrounding illumination and the object have large differences in brightness, such as bright light from a window shining in behind your surveillance targets. Settings in this menu largely depend on the capabilities of the camera, and may require testing to find the best performance settings.

HLC: Senses strong sources of light in video and compensates for exposure on these spots to enhance the overall quality. It is effective for preventing very bright spots such as headlights or spotlights from causing the camera to overcompensate its exposure setting.

BLC: Backlight Compensation configures the camera to adjust its exposure appropriately when the target object is in front of a bright background. Essentially, it brightens the darker areas of the image, at the expense of overexposing the brighter areas.

WDR: Wide Dynamic Range sets the camera to adjust the exposure appropriately so that darker areas of the image and brighter areas of the image are exposed optimally. WDR can be ON if BLC is closed. Otherwise, WDR is not selectable.

1. In the **Display Configu**ration menu, click the **expand-more** icon on the **Backlight** line.

	Camera	Ф ± Ф	
ii Camera >	Camera [D1] ALI-NP3013RH ·		
Display Contrau	Camera Name ALI-NP3013RH	OSD Settings >	
		image Settings >	
Privacy Mask		Exposure >	
Video Parameters>	All and a state of the state of	Day/Hight Switch >	
		Backlight	—— Expa
Event >		BLC CLOSE +	more
		Wide Dynami 📰	icon
		HLC OFF -	10011
		Image Enhancement >	
		White Balance >	
	Apply		

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- Open the BLC drop down list, and select either CLOSE or the best choice for the source of the background light. Choices are UP, DOWN, LEFT, RIGHT, CENTER, Region, AUTO.
 - a. If you selected **CLOSE**, you can set WDR ON or OFF, and HLC ON or OFF.
 - b. If you did not select CLOSE, you can set HLC ON or OFF.

- 4. Click **Apply** to save your settings for this camera.
- 5. Repeat sub-steps 2 through 3 above for each camera managed by the NVR.

2.5.6 Camera Image Enhancement

Use the camera Image Enhancement menu to optimize camera contrast. Finding optimal settings for these options may require testing.

1. In the **Display Configu**ration menu, click the **expand-more** icon on the **Image Enhancement** line.

	Camera		
Camera Camera Contage	Carriera Carriera ID1) ALIAP20136H Carriera Harrie ALIAP20138H	CISD Settings > Image Settings > Exposure > Day/Right Switch > Exclight = Digital Noise Normal Mode + Digital Noise Normal Mode + Digital Noise OFF + 3 White Balance >	Expand- more icon
-	Apply		

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- Open the Digital Noise drop down list and select either Close, Normal Mode, or Expert Mode.
 - a. If you selected **Close**, you can select **Defog Mode** ON or OFF.
 - b. If you selected Normal Mode, use the slider to adjust the Digital Noise Reduction to produce the best image. With this option, you can also enable Defog Mode.
 - c. If you selected **Expert Mode**, you can set the Time DNR level and Space DNR level individually, and turn on Defog mode.
- 4. Click **Apply** to save your settings for this camera.
- 5. Repeat sub-steps 2 through 3 above for each camera managed by the NVR.

2.5.7 Camera White Balance adjustment

Adjust the white balance of the camera to display the best color accuracy. Color accuracy depends largely on the ambient light source.



1. In the **Display Configu**ration menu, click the **expand-more** icon on the **White Balance** line.

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- 3. Open the White Balance drop down list and select the mode that produces the best color.
 - a. If you select **MWB** (Manual White Balance), use the sliders to set the Red and Blue color gains.
 - b. If you select **AWB1**, the color is continuously adjusted by the camera.
 - c. If you select Locked WB, the Red and Blue color gains do not change.
 - d. Select any other White Balance mode if the ambient light is largely from those sources.
- 4. Click **Apply** to save your settings for this camera.
- 5. Repeat sub-steps 2 through 3 above for each camera managed by the NVR.

2.5.8 Camera Privacy Mask

Privacy masks are rectangular image blocks used to obscure parts of the field of view where privacy must be maintained, such as areas where sensitive information exists, house windows, etc. You can set up to four privacy masks in the video image.

1. In the **Privacy Mask** menu.



- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- 3. In the video window, drag a rectangle across the area of the field of view where you want to apply a mask. In the image below, the mask was applied to the area over the window in the upper left corner. The color of the boarder surrounding the rectangle indicates the Area number. The mask in the image below has an orange border, indicating Area 1.



- 4. You can drag up to three more rectangles across the screen, each assigned to a different area number, for a maximum of four.
- 5. To clear a mask, click the **Clear Area** button with the color associated with the mask.
- 6. Click **Apply** to save your settings for this camera.
- 7. Repeat sub-steps 2 through 6 above for each camera managed by the NVR, if needed.

2.5.9 Camera Video Parameters

Use the Video Parameters Main Stream and Sub-Stream menus to control the video resolution of the camera and other transmission parameters. These menus, with the network bandwidth calculator available on *AlibiSecurity.com/resources*, can help you get the best performance from your security system network.

Main Stream Parameters

In the Main Stream Parameters menu, you can adjust network parameters for both main stream Continuous recording and Event recording. Refer to the Specifications for your camera(s) to see what options for main stream performance are available.

1. In the Camera menu, click on Video Parameters, and then click on Main Stream Parameters.

		Camera		
ä Camera →	Camera [D1] ALI- Encoding Parameters	NP3013RH - Main Stream(Continuous)	Main Stream(Event)	
Disblay Configu	Stream Type	Mideo & Autho	Video & Audio	
Privacy Mask	Resolution	2048*1636(3MP) -	2048*1530(3MP)	
⇒ Video Parameters~	Bitrate Type	Variable -	Variable	
A CONTRACTOR OF THE OWNER	Video Quality	Highest -	Highest	
Main the Party Pa	Frame Rate	22fps +	22fps	
Sub-Stream	Max. Eltrate Mode	Custom(32-18284)	Custom(32-10304)	
Event >	Max: Bitrate(Rbps)	5401	\$481	
	Max. Bitrate Range Recomme	nded 8440-14080(Rops)	0440-14000(H3ph)	
	Video Encoding	H.264 ·	H 264	
	Enable H 264+			
	Copy to	Autor.		

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- In the Stream Type field, select either Video & Audio (if streaming with audio), or Video. This selection affects the bitrate requirement for the camera.
- 4. Adjust other parameters as needed for the camera performance needed. Notice that you can set different **Frame Rates** for Continuous and Event recording.
- 5. Click **Apply** to save your settings for this camera.
- 6. Click **Copy** to use the same settings for other cameras on your surveillance system.
- 7. Repeat sub-steps 2 through 7 above for each camera managed by the NVR, if needed.

Sub-Streams

In the Sub-Stream menu, you can adjust network parameters for the camera sub-stream channel. Refer to the Specifications for your camera(s) to see what options for sub-stream performance are available. Sub-stream video is useful for remote login to the recorder and on networks where bandwidth is limited.

1. In the Camera menu, click on Video Parameters, and then click on Sub-Stream.

3			Camera		\$ ± ()
G	Camera P	Camera [D1] ALI-NP3	013RH -	2	
0	Display Configu.	Stream Type	Video & Audio	(m)	
-	Privacy Mask	Resolution (Max.: 720P)	352*240(CIF)	18	
1775	Victor Daramaters	Bitrate Type	Variable	-	
		Video Quality	Medium	1.51	
	Main Stream Pa	Frame Rate	Full Frame	(#)	
	Sub-Stream	Max. Bitrate Mode	General		
1	Event >	Max. Bitrate (Rbps) (Max.: 2M)	512	1.1	
		Max. Bitrate Range Recommende	d 394-640(Pbps)		
		Video Encoding	H 264		
_		Copy to	April		

- In the Camera field drop down list, select the camera you want to configure. In the example above, [D1]IPCamera 01 is selected.
- 3. In the Stream Type field, select either Video & Audio (if streaming with audio), or Video. This selection affects the bitrate requirement for the camera.
- 4. Adjust other parameters as needed for the camera performance needed.
- 5. Click **Apply** to save your settings for this camera.
- 6. Click **Copy** to use the same settings for other cameras on your surveillance system.
- 7. Repeat sub-steps **2** through **6** above for each camera managed by the NVR, if needed.

2.5.10 PTZ camera setup

To setup cameras with Pan, Tilt, Zoom (PTZ) capability, refer to "SECTION 6 PTZ Controls" on page 77.

SECTION 3 Event setup

Use this section to configure your system to sense for and log information about what your security system is sensing, such as motion in the field of view, hard disk drive (HDD) full, etc. It also includes procedures for configuring Smart events (Video Content Analytic events), such as face detection, line crossing, intrusion detection, object removal, and other conditions determined by analyzing the video or audio stream. Smart events are features available in some cameras.

The default factory setup configuration sets up all camera channels to record continuously. Since this configuration may will write excessive data on the disk, you can reconfigure your cameras to only write when necessary, such as when motion is detected in a specific area of the video frame.

To access the event setup menus:

1. Right click anywhere in the Live View screen to access the Live View header, if necessary, and then click the Menu icon.

Menu icon —			Live View		<u>م</u> ج ن
	Q. ALLAPODISH IPCamera 02 IPCamera 03		② ALIBI 3 国 ● 食	Ø ALIBI	GALIBI
	PCamera 04 PCamera 06 PCamera 06 PCamera 07	• • ALIBI	⊙alibr	• • Alibr	• • Alibr
	PCamera 00 PCamera 00 PCamera 10 PCamera 11 PCamera 12	• • ALIBI	• • ALIBF	• •	• • Alibr
	PCamera 13 PCamera 14 PCamera 15 PCamera 16	⊙ ALIBI	• • ALIBI	• •	• • Alibr
				1	

2. In the Menu screen, click the Camera icon.



1. In the **Camera** menu, click the link for **Event** in the left frame.

	Camera	
Carnera >	Moleon Detection Video Tampering Video Loss Alarm Input Alarm Dubput Exc Camera 1000000000000000000000000000000000000	eption
Privacy Mask	Area Arming Schedule Unkage Action	
Event ~	Serci. 0	100 60
Smart Event		
	Put Screen Clear	

The Event - Normal menu screen will open showing the Motion Detection menu.

3.1 Normal Event Setup

Normal Events include camera Motion Detection, Video Tampering, Video Loss, recorder/camera events including Alarm Input, and recorder Exception conditions. The recorder Alarm Output configuration is also included in this menus.
3.1.1 Camera Motion Detection

Use the Motion Detection feature to detect motion anywhere in the field of view and log a motion detection event. It can be configured to just sense for motion in parts of the field of view, sense for motion at only certain times of the week, and trigger the system to perform actions when motion is sensed. The default Motion Detection menu is shown below.

	Camera			
G Camera >	Motion Detection Video Tampering Video Loss Alarm Input Alarm Output Camera 0010205502005522 •	Exception		
 Privacy Mask 	Area Arming Scheoule Unikage Action			
 Video Parameters> Event ~ 	Sensi. 0		100	60
Normal Event				
STORE BARK				
	Full Screen Clear			
	Aegdij			

- To use Motion Detection, open the Camera drop down list and then select the camera you want to configure. In the example above, [D1] ALI-NP3013RH is selected.
- 2. Click the **Enable** box to check it. See the screen above.

NOTE Defining a specific area where you want to detect for motion is more efficient for the NVR than searching for motion anywhere in the image.

- To efficiently detect for motion in the field of view, select only the parts of the video image where motion is of interest. Some areas of the field of view may trigger false events, such as trees in the wind, etc. The grid shows where the camera will sense for motion:
 - a. Click **Clear** to erase the grid.
 - b. Drag the mouse pointer across a rectangular area of the video image where you want to detect for motion.



c. When you release the mouse button, a grid will appear in that area.



- d. Repeat the previous sub-step to create setup other areas of video image where you want to sense for motion.
- e. Click Apply to save your settings.
- f. Adjust the **Sensitivity** slider as needed to detect the motion of objects moving through the zones. When motion is detected in a segment of the grid, the segment is filled with red. See the screen above.

NOTE Test your settings during broad conditions to ensure that motion in the field of view triggers an action. You may need to return to this menu later to adjust the **Sensitivity** slider to ensure it is working adequately.

g. Click Apply again to save your settings.

Setup Arming Schedule

4. Click the **Arming Schedule** icon to define the times when motion detection for this camera is sensed (armed). The blue segments in the schedule show when it is armed. By default, when this event is enabled, it is armed continuously.

Conti		None										Edit
0	2	4	6	8	10	12	14	18	18	20	22	24
Mon m												
Tue 📰					0.00						1	
Ned												
mu 📰												
n 💼												
iat 📖												
Sun I						STATE OF TAXABLE						

You can change the Arming Schedule in either of two ways: using the Edit and using the graphical method. To use Edit:

a. Click the **Edit** button shown in the screen above. An edit menu will open.

Mon									
06:00-	16:00					۲	-		
06	1141 00	141	16	in and	00	14			
00.00-	00.00								
00.00-	00.00					٢	100		Edit
00.00-	00.00						20	22	24
00 00-	00 00								
00.00-	00 00					\odot			
00.00-	00.00								-
6-mil	Arrely		OK.		C.u.e.		-	1000	1
	Mon 06 00- 0 00- 0 00- 0 00- 0 00- 0 00- 0 00- 0 00-	Mon 06 00-18 00 06 360 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00-00 00	Mon 00:00-10:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00	Mon 06:00-16:00 06:00-00:00 00:00-00 00:00-00:00 00:00	Mon 00:00-10:00 00:00-00:00 00:00 00:00-00:00 00:	Mon 06:00-18:00 06 360 00 360 18 00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00 00:00-00:00	Mon 08:00-18:00 C 06 Ball 00 Ball 18 00 Ball 00:00-00:00 C	Mon 00:00-10:00 C 00:00-00:00 C	Mon - 00 00-10 00 00 10 22 00 0 0 0 0 0 0 0 0 0 0 0

- b. Click Weekday, and then select the day of the week you want to edit. For each day of the week, you can define up to seven time segments.
- c. Click the Start/End Time field. An adjustment bar will open.
- d. In the adjustment bar, click the up and down carets to set the hour and minute to start arming, and the hour and minute to end arming for this segment. In the example above, the segment starts at 0600 (6:00 am) and ends at 1600 (4:00 pm).
- e. Create additional segments for that day as needed. Segments cannot overlap.
- f. Click **Apply** to save your settings.
- g. Click Copy to copy this schedule to other days of the week. Follow the on-screen instructions to use this menu.
- h. In the Edit menu, click **OK** to return to the **Arming Schedule**. Changes you saved will be reflected in the schedule.

Arming Schedule "graphical" method

The graphical editing method is used by clicking either **Continuous** or **None**, then dragging a box over the areas of the schedule when you want to either enable or disable arming. For example, to disable arming in an area of the schedule:

- a. Click the None icon at the top of the Arming Schedule.
- b. Using the mouse, drag a rectangle over the area of the schedule where you want to disable arming. The area you selected is shown by a red rectangle.

Cont	A 🔲	None										Edit
0	2	4	6	.0	10	12	14	16	10	20	22	24
don 🔳	THE OWNER								-	_		
lue 🔳												
Ved	a presi presi											
ihu 🔳												
-n 💻												
lat 🔳	No.											
dun 🔳									-		-	

c. Release the mouse button. The part of the schedule you selected is now disarmed.

Cont	- 🖸	None										Edt
0	2	4	6	8	10	12	14	16	18	20	22	24
Mon 💼												
Tue 💼												
Wed												
Thu 📰					mand Sector							12
Fri 💼					-							5
Sat 📰					100							
Sun 📰												1

d. Click **Continuous** and repeat this method to restore area to the arming schedule, if needed.

Linkage Action

5. Click the Linkage Action tab.

	Camera >	Motion Detection Vide	o Tampering Video Loss	Alarm Input	Alarm Output	Exception	
2	Display Configu Privacy Mask	Camera (D1) ALI- Enable Area Arming Schedul	NP3013RH +				
7	Video Parameters>	Normal Linka	Trigger Alarm Ou.	Trigger Chu			
D	Event ~	Full Screen Monit	Excelor1	IDD1			
	Normal Event	Audible War	Local->2	D2			
	Smart Event	Send Email	Local->3	D3			
			Local->4	D4			
			192.168.254.2.8000->1	DS			

- 6. In the **Linkage Action** menu, check the boxes for the actions you want to occur when event is detected.
- 7. Click Apply to save your settings.
- 8. Repeat steps **1** through **7** above for each camera on your surveillance system.

3.1.2 Camera Video Tampering

Video Tampering can log an alarm event when the camera lens, or part of the field of view, is covered. To use this feature:

1. Open the Video Tampering menu. Go to Menu | Camera | Event | Normal Event | Video Tampering.

	Camera	⇔ ± ୯
Gi Camera >	Motion Detection Video Tampering Video Loss Alarm Input Alarm Output Exception	
Display Configu.	Camera [D1] ALI-NP3013RH -	
🔄 Privacy Mask	D Enable Area Arming Schedule Linkage Action	
> Video Parameters>		
Event 🗠	Con Training	
Smart Event		
	Clear	
	Aqiphy .	

- 2. Click the **Enable** box to check it.
- 3. Drag a rectangle across the area of the video window where you want to sense for Video Tampering.



- 4. Adjust the **Sensitivity** as needed to effectively sense for tampering. Options are 0, 1, 2.
- 5. Click **Apply** to save your settings.
- 6. Click the **Arming Schedule** tab. To configure the arming schedule, refer to the procedure in "3.1.1 Camera Motion Detection" on page 29.
- 7. Click the Linkage Action tab.

	Camera	\$ ± ()
Cig. Camera > Display Contigu Privacy Mask Video Paraneters>	Motion Detection Votes Tampering Video Loss Alarm Input Alarm Output Camera [D11 AL3-NP3013BH - Enable Area Arming Schedule Linkage Action	Exception
Event ~	Normal Linia, Trigger Alarm Qu.	
	192.108.254.2.0000->1	

- 8. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 9. Click Apply to save your settings.
- 10. Repeat steps 1 through 9 above for each camera on your surveillance system.

3.1.3 Camera Video Loss

Video loss occurs when the video signal from the camera is no longer detected. This can result from many causes, such as a disconnected cable, hardware or cable failure, power loss, etc. To use this feature:

1. Open the Video Loss menu. Go to Go to Menu | Camera | Event | Normal Event | Video Loss.

	Carriera >	Motion Detec	tion	Video Ti	ampering	Video	Loss	Alarm in	put A	arm Out	NA E	ception		
2	Display Configu	Enable	(D	1] ALENP	3013RH									
5	Privacy Mask	Arming Sch	Enat	Linkage	e Action									
ę.	Video Parameters>	Cor6		None										Edt
ċ	-	0	2	4	0		10	12	14	16	18	20	22	24
ł.	Event	Mon I	-	1										
	Normal Event	Tue I												
	A	Wed												
	Smart Event	Thu I		1										
		Fn 📰												
		Sat _												
		Sun												

- 2. Click the Enable box to check it.
- Click the Arming Schedule tab. To configure the arming schedule, refer to the procedure in "3.1.1 Camera Motion Detection" on page 29.
- 4. Click the Linkage Action tab.

	1	
Normal Linka	Trigger Alarm Ou	
Full Screen Monit	Lucal-+1	
Audible War	Local->2	
Notify Surveil	Local>3	
	Local-P4	
	192 168 254 2 8000->1	

- 5. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 6. Click **Apply** to save your settings.
- 7. Repeat steps 1 through 6 above for each camera on your surveillance system.

3.1.4 Alarm Input detection

The Alarm Input menu lists all alarm inputs supported by the recorder, plus all alarm inputs of the cameras attached to your surveillance system. An alarm input can generate a log event and trigger actions in the recorder, such as recording camera video or video capture. To configure alarm inputs:

1. Open the Alarm Input menu. Go to Menu | Camera | Event | Normal Event | Alarm Input.

		e	amera			-0 ±
Camera >	Motion Detection Vid	eo Tampering	Video Loss	Alarm Input	Alarm Output	Exception
Display Configu.	Alarm Input No	Alarm Name		Alarm Type	Enable	Edit
	Locates 1					
Privacy Mask	Local-2			NO	No	
The American States and States an	Locale-3			NO	No	
	Locale-4			NO	No	
🗐 Event 🗠	Local=-6			NO	No	
C50 019070	Local~6			N.O.	No	
	Locals-7			NO	No	
Smart Event	Local-68			NO	No	
	Local9			NO	No	
	Locale-10			NO	No	
	Local-11			NO	No	
	Locale-12			NO	No	
	Local++13			NO	No	
	Local-14			N.O	No	
	Local«-15			NO	No	
	Local-18			NO	No	10

 Click the icon in the Edit column of the alarm input you want to configure. In the pop-up menu shown below, Local<-1 (Alarm In 1 on the back of the recorder) was selected.

Edt						×
Alarm Inpu	Local«-1	4	Туре	NO	×	
Alarm Name						
Settings	Nonuse	Input		One-Key Dis		

- 3. In the **Alarm Name** field, enter a common name for the alarm.
- 4. Open the **Type** field, and select either **N.O.** for a Normally Open alarm switch, or **N.C.** for a Normally Closed alarm switch.
- 5. Click the radial button for either **Nonuse** (disable) or **Input** (enabled). By default, all inputs are in **Nonuse** mode. If you selected **Input**, Arming Schedule and Linkage Action option menu tabs will appear.

Alarm Inpu Local - 1	- Typ	N.O	+1	
Alarm Name Storage I	Rm 1			
Settings Nonur	se • Input	One-Key Dis		
Arming Schedule Lin	skage Action			
Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
EFull Screen Mont	Econd->1	DI	PTZ Linkage	(01) AU-1 -
Audible War	Local->2	D2	Preset	1
Notify Surveil	Local 23	-02	Patrol No.	<u>_</u>
Send Ernall	cocarro		Pattern	St 1
	Local->4	D4		
	192 188 254 2 8000 > 1	DS		

- a. Click the **Arming Schedule** tab. To configure the arming schedule, refer to the procedure in "3.1.1 Camera Motion Detection" on page 29.
- b. Click **Apply**, and then click **Copy to** and use the on-screen menu to use the same schedule for other alarm inputs.
- c. Click the **Linkage Action** tab (see above). In the linkage action menu, check the boxes for the actions you want to perform when the input becomes active (N.C switches open or N.O. switches close).
- d. Click Apply, and then click Copy to and use the on-screen menu to use the same linkage actions for other alarm inputs.
- 6. Click the Close icon (X) in the upper right corner of the **Edit** screen to return to the Alarm Input menu.
- 7. Repeat steps 1 through 6 above for each alarm input on your surveillance system.

3.1.5 Alarm Output configuration

The Alarm Output menu lists all alarm outputs supported by the recorder, plus all alarm outputs of the cameras attached to your surveillance system. An alarm output can be used to activate an accessory attached to your surveillance system, such as a siren, light, door unlock relay, etc. To configure alarm outputs:

1. Open the Alarm Input menu. Go to Menu | Camera | Event | Normal Event | Alarm Output.

	Can	nera	4 ± 0
Gij Camera >	Motion Detection Video Tampering Vid	teo Loss Alarm Input Alarm Output	Exception
Display Configu	Alarm Output No. Alarm Name	Dwell Time	L Edit
E Privacy Mask	Local->2	54 54	*
D Video Parameters>	Local>3	5 s	
T Fuent -	Local->4 192 168 254 2.8	6s 5s	
Normal Event			
Smart Event			

 Click the icon in the Edit column of the alarm output you want to configure. In the pop-up menu shown below, Local—>1 (Alarm OUT 1 on the back of the recorder) was selected.

		and the second s			Passes 11	1110	(h) (
Jarm Nam	e				Alarm S	tatus Cl	ose					
Arming Sct	hedule											
Conti		None										Eat
0	2	4	6	8	10	12	14	16	18	20	22	24
Mon												
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Wed and												
Thu ma						100 100						
Fri 📰												
5M												
Sun 📷						and set						

- 3. In the **Alarm Name** field, enter a common name for the alarm.
- Open the Dwell Time drop down list, and then select the time the alarm will remain active after it is initiated. You can also select Manually clear.
- Click the Arming Schedule tab. To configure the arming schedule, refer to the procedure in "3.1.1 Camera Motion Detection" on page 29.
- 6. Click **Apply**, and then click **Copy to** and use the on-screen menu to use the same schedule for other alarm outputs.
- 7. Test the alarm output functionality by clicking **Trigger** to activate the alarm, and then **Clear** to deactivate it.
- 8. Click the Close icon (×) in the upper right corner of the **Edit** screen to return to the Alarm Input menu.
- 9. Repeat steps **1** through **8** above for each alarm output on your surveillance system.

3.1.6 Exception reporting

The NVR monitors for and responds to certain system-related alarm conditions (exception types). Monitoring for and response to these exceptions are configurable using the Exception menu.

Exception types include:

- HDD Full: The HDD is full.
- HDD Error: Writing HDD error or unformatted HDD.
- Network Disconnected: Disconnected network cable.
- IP Conflicted: Duplicated IP address.
- Illegal Login: Incorrect user ID or password.
- Record/Capture Exception: No space exists for saving recorded files.
- PoE Power Overload: PoE power consumption of the cameras connected to the internal Ethernet switch exceeds the
 maximum PoE power.
- HDD SHM Detection Exception: Seagate SkyHawk[™] Health Management (SHM) exception condition

Responses to exception alarms include:

- Audible Warning: Trigger an audible beep when an alarm is detected.
- Send Email: Send an email with alarm information to a user or users when an alarm is detected. Also sends a push
 notifications to .Alibi Witness 2.0.
- Notify Surveillance Center: Sends a push notifications to Alibi Witness 2.0, message to Alibi Central Management Software (ACMS) system.
- Trigger Alarm Output: Trigger an alarm output when exception is detected.

To configure exception alarms:

1. Open the Exception menu. Go to Menu | Camera | Event | Normal Event | Exception.

	Camera	4 ± ()
Ca Camera > C Display Configu C Privacy Mask	Motion Detection Video Tampering Video Loss Alarm Input Alarm O Enable Eve. Event Hert. Exception T	utput Exception
Event Smart Event	Normal Lakage Trager Alarm Cutput Audde Wanning Image: Alarm Cutput Notify Survivance Cen. Local-2 Send Email Local-2 102160 254 2 8000-11	

- Check the Enable Event Hint box to use hint reporting. When this feature is enabled and an event or exception occurs, a hint is displayed on the live view image. And you can click on `the hint icon to check the details. The event hints to be displayed is configurable:
 - a. Open the **Event Hint** drop down list, and deselect the event hints you don't want to see. By default, all hints are enabled.
- On the Exception Type line, open the drop down list and select the exception condition you want to monitor. If you select All, all exception conditions will be treated the way you configure the response. You can deselect the types of exceptions you don't want to see reported.
- 4. Check the select boxes for the response options you want to use.
- 5. Click Apply to save your settings.

3.2 Smart Event Setup

Smart event detection uses the video or audio stream to sense for line crossing, face detection, intrusion detection, etc. These events are commonly referred to as VCA events, and are available on most Alibi professional grade cameras. The smart features that appear at the top of the Smart Event menu are the features supported by the camera selected at the top of the screen.

When VCA features are configured by a recorder, the settings are saved in the camera. When a VCA event occurs, the event information is sent immediately to the recorder and acted upon by recording live video, full screen monitoring, generating an audible alarm etc.

These recorders support the following VCA features:

- Face Detection Detects when a face appears in the field of view.
- Line crossing detection You can specify the endpoints of an virtual line in the video image and then detect if something
 crosses the line from one side to the other (side A to B), vice versa (side B to A) or either way. You can define 1 line crossing
 condition for each NS series IP cameras, and 4 line crossing conditions for each NP series IP cameras and TVI recorders with TVI
 cameras.
- Intrusion detection You can create an virtual quadrangle in the video image, and then detect if something enters the space within the quadrangle. You can define 1 intrusion region for NS series IP cameras, and 4 intrusion regions for NP series IP cameras.
- Region entrance detection Region entrance detection function detects people, vehicles or other objects which enter a
 pre-defined virtual region of the field of view.
- Region exiting detection Region exiting detection detects people, vehicles or other objects which exit from a predefined virtual region of the field of view.
- Unattended baggage detection Unattended baggage detection can detect when objects such as baggage, a purse, dangerous materials, etc. are left in the pre-defined area of the field of view.
- **Object removal detection** Object removal detection detects when an object, such as an exhibit on display, is removed from the pre-defined area of the field of view.
- Audio exception detection Audio exception detection detects when an abnormal sound, such as the sudden increase / decrease of the sound intensity, occurs in the surveillance area.

- Defocus detection Defocus detection senses when image blur, caused by defocus of the lens, occurs.
- Sudden scene change detection Scene change detection detects the change of surveillance environment affected by an external factor, such as the intentional rotation of the camera.

3.2.1 Camera Face Detection

The Face detection analytic detects when a face appears in the surveillance field of view. To configure Face Detection in the camera:

- 1. Open the Face Detection menu:
 - a. Go to Menu | Camera | Event | Smart Event

	Camera 우 놀 ()
Ca Camera >	Camera [D1]ALI-NP3013RH · × Save VCA Pi
Oisplay Configu	Central Line Crossi Intrusion Region Ent Region Ext Unattended Object Re Audio Exce
🕎 Privacy Mask	Enable Face Detection Sensiti. 1 5 4
CCD Video Parameters>	Arming Schedule Linkage Action
🗐 Event 🗠	Cont. None Edt
Normal Event	0 2 4 6 8 10 12 14 18 16 20 22 24 Mon
timat livent	Tue 2 Wed 3 True 4 Pri 4 Set 4 Pri 4 Set 4 Pri 4 Viel 4 Pri 4 Set 4 Set 4 Pri 4 Pri
	Accide

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Face Detection option appears in the VCA list at the top of the screen, click on it to configure this feature.
- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the Enable Face Detection box to check it.
- 4. Set the Sensitivity slider as needed to detect faces in the field of view. This adjustment may require some testing.

Setup Arming Schedule

5. Click the **Arming Schedule** icon to define the times when motion detection for this camera is sensed (armed). The blue segments in the schedule show when it is armed. By default, when this event is enabled, it is armed continuously.

Conti		None										Edit
0	2	4	6	8	10	12	14	16	18	20	22	24
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Ned												
Thu 📰												-
n 📃												
int 📰												
sun I	THE OWNER								COLUMN DOCUM			

You can change the Arming Schedule in either of two ways: using the Edit and using the graphical method. To use Edit:

a. Click the **Edit** button shown in the screen above. An edit menu will open.

Weekday		Mon							-				
Start/End Time	1	06.00	0-16:00						0				
Start/End Time		06	141	00	181	16	100g	00	14				
Start/End Time		00.00	0-00.00										
Start/End Time		00.00	0-00 00									Edil	1
Start/End Time		00.00	0-00.00							20	22	24	
Start/End Time		00.00	0-00-00										1
Start/End Time		00.00	0-00-00						۲				3
Start/End Time		00.00	0-00-00										4
													5
													6
											No.		7
	Cor	W.	11 3	hoply		OK		Cancel					

- b. Click **Weekday**, and then select the day of the week you want to edit. For each day of the week, you can define up to seven time segments.
- c. Click the Start/End Time field. An adjustment bar will open.
- d. In the adjustment bar, click the up and down carets to set the hour and minute to start arming, and the hour and minute to end arming for this segment. In the example above, the segment starts at 0600 (6:00 am) and ends at 1600 (4:00 pm).
- e. Create additional segments for that day as needed. Segments cannot overlap.
- f. Click **Apply** to save your settings.
- q. Click **Copy** to copy this schedule to other days of the week. Follow the on-screen instructions to use this menu.
- h. In the Edit menu, click OK to return to the Arming Schedule. Changes you saved will be reflected in the schedule.

Arming Schedule "graphical" method

The graphical editing method is used by clicking either **Continuous** or **None**, then dragging a box over the areas of the schedule when you want to either enable or disable arming. For example, to disable arming in an area of the schedule:

- a. Click the None icon at the top of the Arming Schedule.
- b. Using the mouse, drag a rectangle over the area of the schedule where you want to disable arming. The area you selected is shown by a red rectangle.

Conti		None										Edit
0	2	4	6	.0	10	12	14	16	10	20	22	24
Aon I			1 1	Contraction of the local sectors of the local secto					-	_	tion of the local division of the local divi	-
ue 📰												-
Ved												
hu 🔚												- H
n 🛌												
at 💻												
un 📰												

c. Release the mouse button. The part of the schedule you selected is now disarmed.

rea Ar	ming Sc	hedule	Linkage	Action								
Cort		None										Edt
0	2	4	6	8	10	12	14	16	18	20	22	24
Mon 📰		1.1										
lue 📰												
Ved												
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kun 📰												

d. Click **Continuous** and repeat this method to restore area to the arming schedule, if needed.

Linkage Action

6. Click the **Linkage Action** tab.

Display Configu	Defocus Sudden Se	i Intrusion Region Ent.	Region Exit Unatter	nded (Object Re	Audio Exce
Privacy Mask Video Parameters>	Enable Face Detector Arming Schedule	n Kage Action	Sensili 1		5 [4]
] Event 🗠	Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Normal Event	Full Screen Mont. Audble War. Nothy Survet. Send Email	Cocol+>1 Local+>2 Local+>3 Local+>4 192.160.254.2:0000.+1	801 02 03 04 06	PTZ Linkage Preset Patrol No. Pattern	[D1] ALH + 1 1 1

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click **Apply** to save your settings.
- 9. Repeat steps **1** through **8** above for each camera on your surveillance system as needed.

3.2.2 Line Crossing detection

With Line Crossing detection you can specify the endpoints of an virtual line in the video image and then detect if something crosses the line from one side to the other (side A to B), vice versa (side B to A) or either way. You can define 1 virtual line for each NS series camera, and 4 virtual lines for each NP series IP camera. To use Line Crossing Detection:

- 1. Open the Line Crossing Detection menu:
 - a. Go to Menu | Camera | Event | Smart Event

8	Camera >	Camera		DIJALI-N	P3013RH	1 10 1	Save	CA PI						
Ð	Display Configu	Defocut	Sud	Crossi) den Sc)	Intrusio	Regi	on Ent	Region E	vit Unat	tended	Object	Re Au	dio Exce	2
5	Privacy Mask	C Enable	Face D	etection				Sensiti	1 -			5	4	
-	Video Parameters>	Arming Sc	hedule	Linkag	e Action									
ti i	Event 🗠	Conb		None										Edt
		0	2		6		10	12	14	18	10	20	22	24
	Normal Event	Mon I												1
	Smart Rivert	Tue 📰					100							2
		Wed					100 C							3
		Thu												4
		Fri												5
		Sat												6
		Sun												7

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Line Crossing option appears in the VCA list at the top of the screen, click on it to configure this feature.

	Camera	
Cai Camera > C Display Contigu. E Privacy Mask ────────────────────────────────────	Carriera [D1] ALN#730136H / Sare VCA PL. (Face Dete	Re(Audio Exce_)
Event ~ Hermal Event Smort Knewt	Presidential Annual Schedule Charge Action	*) - 100 59

- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the Enable Line Crossing Detection box to check it (see above).

4. In the Area Settings tab:

- a. Open the **Region** drop down list and select a number to be associated with the virtual line you are creating. For NP series IP cameras you can select either 1, 2, 3 or 4.
- b. Open the **Direction** drop down list, and select the direction of line crossing to sense for. After you create the virtual line, an arrow will appear across the line showing the direction it is configured to sense for.
- c. Set the **Sensitivity** slider as needed to detect objects crossing the line. This adjustment may require some testing.
- d. Click the **Draw Region** button. Then click a point in the video image to identify one endpoint of the virtual line, then click another point to represent the other endpoint of the line.
- e. Click the **Stop Drawing** button. A line will appear on video image showing the Region number and direction of crossing you configured it to sense for.
- f. Click Apply to save your settings.
- g. To create another virtual line for crossing detection, repeat sub-steps a through e above with a different region number. You can create up to four virtual lines in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the Linkage Action tab.

Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage		
Full Screen Monit	Local->1	8 01	PTZ Linkage	[D1] ALH	•
Audible War	Local->2	D2	Preset_	3 .	
Notify Surveil	21040040-0		Patrol No	1	
Send Email	Local->3	D3	Pattern	1	
	Local->4	D4			
	192 160 254 2 0000->1	DS			

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click Apply to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.3 Camera Intrusion Detection

With camera Intrusion Detection, you can create up to four virtual quadrangles (planes) in the video image, and then detect if something enters the space within a plane. To use Intrusion Detection:

- 1. Open the Intrusion Detection menu:
 - a. Go to Menu | Camera | Event | Smart Event



- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Intrusion option appears in the VCA list at the top of the screen, click on it to configure this feature.

	Camera 우 쓰 (
Cji Camera →	Camera [D1]ALI-NP3013RH + < Save VCA Pr	
Display Configu	(Face Dete Une Cross) (Region Ent Region Ext Unattended) Object Re (Audio Exce) Defocus (Sudden Sc)	
Privacy Mask	- Enable Intrusion Detection	
IIII Video Parameters>	Area Settings Arming Schedule Linkage Action	
🗐 Event 🗠	Vitual Plane 1 +	
Normal Event	Time Thresh	
Smart Event	Sensibility 1	
	Percentage 1 100 22	
	Draw Re Clear	
	Apply	

- 2. Check the **Save VCA Picture** box to capture a live view image of the VCA event.
- 3. Click the Enable Intrusion Detection box to check it (see above).
- 4. In the Area Settings tab:
 - Open the Virtual Plane drop down list and select a number to be associated with the virtual plane you are creating. For NP series IP cameras you can select either 1, 2, 3 or 4.
 - b. Drag the **Time Threshold** slider left or right to set the minimum amount of time an object must be in the virtual plane to trigger an event.
 - c. Set the **Sensitivity** slider as needed to detect objects entering the plane. This adjustment may require some testing.

- d. Set the **Percentage** slider as needed. The percentage setting represents the percentage of the plane that needs to be filled by the object entering it to generate an event.
- e. Click the **Draw Region** button. Click a point in the video image to identify one corner of the region, and then click three points in a circular fashion to set the other three corners of the region.
- f. Click the **Stop Drawing** button. A quadrilateral will appear on video image showing the Virtual Plane number you assigned.

Area Settings Arming Schedule	Linkage Action			
-	Virtual Plane	1		
and the state of the state	Time Thresh.	0	- 10	2
	Sensitivity	1	- 100	50
	Percentage	1	- 100	32
	4 -			
the state of the state of the state of the	and the second se			
Draw Re Clear				

- g. Click Apply to save your settings.
- h. To create another virtual line for crossing detection, repeat sub-steps a through f above with a different region number. You can create up to four virtual planes in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the **Linkage Action** tab.

Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Full Screen Monit	Local-s1	2 01	PTZ Linkage	(D1) ALH -
Audible War	Local>2	D2	Preset	3.
Nobly Surveil	0.00000000	207.0	Patrol No	
Send Email	Local->3	D3	Pattern	1
	Local->4	D4		
	192 160 254 2 0000->1	DS		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click Apply to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.4 Region Entrance Detection

Use Region Entrance detection to detects people, vehicles or other objects which enter a pre-defined virtual plane in the field of view. You can configure up to four virtual planes in on video channel. To use Region Entrance Detection:

1. Open the Region Entrance Detection menu:

a. Go to Menu | Camera | Event | Smart Event

	Camera 🗘 🕹	
G Camera →	Camera [D1]ALI-NP3013RH + < Save VCA PL	
Display Configu.	Control Line Crossi Intrusion Region Ent. Region Ext. Unattended. Object Re. Audio Exce.)
🐑 Privacy Mask	C Enable Face Detection Sensiti 1 5 4	
Video Parameters>	Arming Schedule Linkage Action	
🗐 Event 🗠	Conti	Edt
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		4
		6
	Sur	- '
	Apply	

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Region Entrance option appears in the VCA list at the top of the screen, click on it to configure this feature.

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C Control Configue	Image: Conserve C	

- 2. Check the **Save VCA Picture** box to capture a live view image of the VCA event.
- 3. Click the Enable Region Entrance Detection box to check it (see above).
- 4. In the Area Settings tab:
 - Open the Region drop down list and select a number to be associated with the region you are creating. For NP series IP cameras you can select either 1, 2, 3 or 4.
 - b. Set the **Sensitivity** slider as needed to detect objects entering the region. This adjustment may require some testing.

- c. Click the **Draw Region** button. Click a point in the video image to identify one corner of the region, and then click three points in a circular fashion to set the other three corners of the region.
- d. Click the **Stop Drawing** button. A quadrilateral will appear on video image showing the region number you assigned.

Area Settings Arming Schedule Linkage Action				
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the second second				
Draw Re Clear				

- e. Click **Apply** to save your settings.
- f. To create another region, repeat sub-steps **a** through **d** above with a different region number. You can create up to four regions in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the Linkage Action tab.

Area Settings Armini	g Schedule Linkage Action			
Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Full Screen Monit	ELOCOl>1	CD1	PTZ Linkage	(D1) ALH +
Audible War	Local->2	D2	Preset	1
Nobly Surveil	17252230522	10000	Patrol No	1
Send Email	Local->3	55	Pattern	1
	Local->4	D4		
	192.168.254.2.8000->1	D6		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click Apply to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.5 Camera Region Exiting Detection

Use Region exiting detection to detects people, vehicles or other objects which exit from a pre-defined regions of the field of view. You can configure up to four regions in on video channel. To use Region Exit Detection:

- 1. Open the **Region Entrance Detection** menu:
 - a. Go to Menu | Camera | Event | Smart Event



- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Region Exit option appears in the VCA list at the top of the screen, click on it to configure this feature.

Camera	
Carriera DityData Protocolo Evit Consultational Con	a) Organt Re (audio Exce)

- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the Enable Region Exiting Detection box to check it (see above).
- 4. In the Area Settings tab:
 - Open the Region drop down list and select a number to be associated with the region you are creating. For NP series IP cameras you can select either 1, 2, 3 or 4.
 - b. Set the **Sensitivity** slider as needed to detect objects leaving the region. This adjustment may require some testing.
 - c. Click the **Draw Region** button. Click a point in the video image to identify one corner of the region, and then click three points in a circular fashion to set the other three corners of the region.

d. Click the **Stop Drawing** button. A quadrilateral will appear on video image showing the region number you assigned.



- e. Click **Apply** to save your settings.
- f. To create another region, repeat sub-steps **a** through **d** above with a different region number. You can create up to four regions in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the Linkage Action tab.

Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Full Screen Monit	Local>1	1001	PTZ Linkage	(D1) ALH -
Audible War	Local->2	D2	Preset	1
Notify Surveil.	100000000000		Patrol No.	1
Send Email	Local->3	09	Pattern	r -
	Local->4	D4		
	192 188 254 2 8000 >1	DS		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click **Apply** to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.6 Camera Unattended Baggage

Use Unattended baggage detection to detect when objects such as baggage, a purse, dangerous materials, etc. are left in the predefined area of the field of view. To use Unattended Baggage detection:

- 1. Open the **Region Entrance Detection** menu:
 - a. Go to Menu | Camera | Event | Smart Event



- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the **Unattended** option appears in the VCA list at the top of the screen, click on it to configure this feature.

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Deptay Conigu. Proc Dies. J. Proc Cross. Inclusion. Program Ent. Program Ent. Capacit Ris. Audio Exce. Proc Dies. Levisor Action Proc Dies.	Inve VCA PI. Inv. Proport Ext. Connect Re. (Audio Exce.) Bon Resion 1 ** Time Thresh. 5 5000 5 Sensibility 1 100 50	Camera [D1] AL3 HP30138H S S Pace Dele Line Cross. Induson Region E Defocus Budden Sc. C. Ensbie Unstanded Baggage De. Area Settings Arming Scheiskie Linisige Act Derover Re Clear	Carera

- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the Enable Unattended Baggage Detection box to check it (see above).
- 4. In the Area Settings tab:
 - a. Open the **Region** drop down list and select a number to be associated with the region you are creating. You can select either 1, 2, 3 or 4.
 - b. Use the **Time Threshold** slider to set the amount of time the object must stay in the region before an event is generated.
 - c. Set the **Sensitivity** slider as needed to detect objects in the region. This adjustment may require some testing.

- d. Click the **Draw Region** button. Click a point in the video image to identify one corner of the region, and then click three points in a circular fashion to set the other three corners of the region.
- e. Click the **Stop Drawing** button. A quadrilateral will appear on video image showing the region number you assigned.

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	Region	1	*
and the second se	Time Thresh	5	3600 5
	Sensitivity	1	100 50
op Dra Clear			

- f. Click **Apply** to save your settings.
- g. To create another region, repeat sub-steps **a** through **e** above with a different region number. You can create up to four regions in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the Linkage Action tab.

Normal Linka	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Full Screen Monit	Local->1	10 01	PTZ Linkage	[D1] AU-I
Audible War	Local->2	02	Preset	1
Notify Surveil			Patrol No.	- (C)
Send Ernait	Locat>3	09	Pattern	1.
	Local->4	D4		
	192 168 254 2 8000->1	DS		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click **Apply** to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.7 Camera Object Removal Detection

Use Object removal detection to detects when an object, such as an exhibit on display, is removed from the pre-defined area of the field of view. To use Object Removal detection:

- 1. Open the **Region Entrance Detection** menu:
 - a. Go to Menu | Camera | Event | Smart Event



- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the **Object Removal** option appears in the VCA list at the top of the screen, click on it to configure this feature.

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	Draw Re Clear	

- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the Enable Object Removal Detection box to check it (see above).
- 4. In the Area Settings tab:
 - Open the Region drop down list and select a number to be associated with the region you are creating. For NP series IP cameras you can select either 1, 2, 3 or 4.
 - b. Use the **Time Threshold** slider to set the amount of time the object is removed from the region before an event is generated.
 - c. Set the Sensitivity slider as needed to detect objects removed from the region. This adjustment may require some testing.

- d. Click the **Draw Region** button. Click a point in the video image to identify one corner of the region, and then click three points in a circular fashion to set the other three corners of the region.
- e. Click the **Stop Drawing** button. A quadrilateral will appear on video image showing the region number you assigned.

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- f. Click **Apply** to save your settings.
- g. To create another region, repeat sub-steps **a** through **f** above with a different region number. You can create up to four regions in the video channel.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the **Linkage Action** tab.

Normal Linka	Trigger Alarm Ou.	Trigger Cha	PTZ Linkage	
Full Screen Monit	Eucal-et	8 01	PTZ Linkage	(DI] AU-I -
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Send Ernait	Local->3	03	Pattern	1
	Local->4	D4		
	192 168 254 2 8000->1	DS		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click Apply to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.8 Camera Audio Exception Condition

Use Audio exception detection to detects when an abnormal sound, such as the sudden increase / decrease of the sound intensity, occurs in the surveillance area. A microphone must be attached to the camera you are configuring, and the camera channel must be configured for audio streaming. To configure Audio Exception:

- 1. Open the Region Entrance Detection menu:
 - a. Go to Menu | Camera | Event | Smart Event

	Camera 우 土	
Că Camera >	Camera [D1] ALI-NP3013RH - Save VCA Pt.	
Display Configu	Interior Interior Region Ent Region Ent Unattended Object Re Audio Exce Defocus Sudden Sc <	
Ej Privacy Mask	Enable Face Detection Senail. 1 5 4	
🖘 Video Parameters>	Arming Schedule Linkage Action	
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Normal Event	0 2 4 6 8 10 12 14 18 18 20 22	24
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	series.	

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the Audio Exception option appears in the VCA list at the top of the screen, click on it to configure this feature.

	Camera 🗛 🕹 🕛	
Camera > Cam	Carriera [D1].4LLNP3013RH · Save VCA P Price Date Line Cross. Indusion Pregon Ext. Pregon Ext. Instanded. Object Re	
	Aculty	

- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. In the Exception Detection tab:
 - a. Click the Audio Loss Exception box to check it (see above) to use this feature.
 - b. Click the Sudden Increase of Sound Intensity Detection button (see above) to use this feature, then:
 - i. Set the **Sensitivity** slider to set the high sound level minimum threshold (may require testing).
 - ii. Set the **Sound Intensity Threshold** slider to set the minimum threshold (may require testing).
 - c. Click the Sudden Decrease of Sound Intensity Detection button (see above) to use this feature, then:
 - i. Set the **Sensitivity** slider to set the a low sound level maximum threshold (may require testing).

- 4. Click Apply to save your settings.
- Click the Arming Schedule tab. To configure the arming schedule, refer to Setup Arming Schedule in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the **Linkage Action** tab.

Exception Detection	Arming Schedule Linkage	Action		
Normal Linka.	Trigger Alarm Ou	Trigger Cha	PTZ Linkage	
Full Screen Monit	Eccus->1	BD1	PTZ Linkage	[D1] ALH
Audible War	Local->2	D2	Preset	· · · ·
Notity Surveil	222 102313	- 1233	Patrol No.	1
Send Email	Local->3	D3	Pattern	1
	Local->4	D4		
	192.168.254.2.8000->1	D5		

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click **Apply** to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.9 Camera Defocus Detection

Use Defocus detection to sense when image blur, caused by defocus of the lens, occurs. To use camera Defocus Detection:

- 1. Open the **Region Entrance Detection** menu:
 - a. Go to Menu | Camera | Event | Smart Event

1 March 199	
Camera >	Camera [D1] ALI-NP3013RH Save VCA PL.
D) Display Configu	Cost Cuto Line Crossi Instruction Region Ent, Region Ent, Unattended, Object Re, Audio Exce. Defocus Sudden Sc.
Privacy Mask	
	Enable Face Detection Sensiti 1 5 4
Video Parameters>	Arming Schedule Linkage Action
🗐 Event 🗠	Conti. None Edd
	0 2 4 6 9 10 12 14 16 18 20 22 24
Normal Event	
Dimort River2	

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the **Defocus** option appears in the VCA list at the top of the screen, click on it to configure this feature.

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-	Camera P	Camera	0	D1] ALI-N	P3013RH	-	- Save	CA PI						
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t i	Event ~	Conti		None										Edt
		0	2	4	6		10	12	14	18	10	20	22	24
	Normal Event	Mon I							11				1 1	1
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- 2. Check the Save VCA Picture box to capture a live view image of the VCA event.
- 3. Click the **Enable** box to check it (see above).
- 4. Adjust the Sensitivity slider to set the amount of defocus threshold (may require testing).
- 5. Click the **Arming Schedule** tab. To configure the arming schedule, refer to **Setup Arming Schedule** in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the **Linkage Action** tab.

Normal Linka	Trigger Alarm Ou	PTZ Linkage		
Full Screen Mont.	Local-+1	PTZ Linkage	(D1) ALH	
Audible War	Local->2	Preset	1	
Notity Surveil		Patrol No.	1	
Send Email	Local>3	Pattern	1	
	Local->4			

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click Apply to save your settings.
- 9. Repeat steps 1 through 8 above for each camera on your surveillance system as needed.

3.2.10 Camera Sudden Scene Change Detection

Use Scene change detection to detects the change of surveillance environment affected by an external factor, such as the intentional rotation of the camera. To use Sudden Scene Change Detection:

- 1. Open the Region Entrance Detection menu:
 - a. Go to Menu | Camera | Event | Smart Event

	Camera 🗘 -	
Gi Camera →	Camera [D1] ALI-NP3013RH - Save VCA Pt.	
Display Configu.	Defocus (Sudden Sc.) intrusion (Region Ent. (Region Ent. (Unattended.) Object Re. (Audio Exce)
Privacy Mask	Enable Face Detection Sensiti 1 S 4	
D Video Parameters >	Arming Schedule Unkage Action	
Event ~	Cont	Edt
Normal Event	0 2 4 6 8 10 12 14 18 18 20 22 Man	24
Smart livent		2
		6
		7
	Apply	

- b. Open the drop down list on the camera line, then select the camera you want to configure.
- c. If the **Sudden Scene** option appears in the VCA list at the top of the screen, click on it to configure this feature.

	Camera 🗘 🛎	
Carrera →	Camera [D1] ALLNP3015RH · Save VCA P. Face Date	
 Privacy Mask Wides Parameters > 	Enable Sensil 1 100 50	
🗐 Event 🗠	Conti None	Edt
Normal Event	0 2 4 8 8 10 12 14 18 18 20 22 Mon	24
Smart Event		234
	Pri Sat	6
	Sun	1

- 2. Check the **Save VCA Picture** box to capture a live view image of the VCA event.
- 3. Click the **Enable** box to check it (see above).
- 4. Adjust the **Sensitivity** slider to set the amount of scene change (may require testing).
- 5. Click the **Arming Schedule** tab. To configure the arming schedule, refer to **Setup Arming Schedule** in "3.2.1 Camera Face Detection" on page 40.
- 6. Click the **Linkage Action** tab.

Normal Linka	Trigger Alarm Ou	PTZ Linkage		
Full Screen Mont	Local-+1	PTZ Linkage	[D1] ALH	
Audible War	Local->2	Preset	1	
Notity Surveil	10000000	Patrol No.	1	
Send Email	Local->3	Pattern	1	
	Local->4			

- 7. In the Linkage Action menu, check the boxes for the actions you want to occur when the event is detected.
- 8. Click **Apply** to save your settings.
- 9. Repeat steps **1** through **8** above for each camera on your surveillance system as needed.

SECTION 4 Startup, Shutdown, Reboot

After the NVR and cameras are installed, the NVR system must be configured to function in the surveillance mode(s) that best serve your needs. This chapter includes the essential steps to get your system running, including configuring the NVR date and time, and setting up the LAN interface, cameras and recording modes. Advanced features, including remote access, video export, adding user names and setting user permissions, etc. are described in later sections of this manual.

4.1 Starting Up

Proper startup and shutdown procedures are essential for getting the most out of your NVR. To startup:

- 1. Check the power cable is plugged into a standard electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device.
- Rock the **POWER** switch on the back panel to the on ("I") position. The Power indicator LED on the front panel should turn green indicating that the unit is powered on.
- 3. After startup, the Power indicator LED remains lit. A splash screen will usually appear on the monitor within three minutes.
- 4. Typically, one of two login screns will appear, depending on how the system was activated:
 - If the unlock pattern was setup during system activation for an *admin* login, the unlock pattern screen will appear. In this
 screen swipe the unlock pattern across the matrix with the mouse to login as the *admin* user, or click **Switch User** and
 login with a username and password as shown below.



If an unlock pattern was not setup during system activation, or you chose to login as a user other than *admin*, a typical login screen will open. Enter your username and password, then click Login.

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4.2 Shutdown

To shut down the NVR:

1. Right click anywhere on the Live View desktop to open a control bar across the top of the screen. The control bar also appears over most configuration windows.



2. Click the **Power Off** icon in the upper right corner, and then click the **Shutdown** icon in the pop-up menu.

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4.3 Reboot

In the **Shutdown** menu shown in "4.2 Shutdown" on page 61, you can also reboot the NVR.

1. Open the Shutdown menu by clicking **Power Off** icon.



- 2. In the **Shutdown** pop-up menu, click **Reboot**.
- 3. Allow the NVR to fully reboot.
- 4. Login to the NVR as described in "4.1 Starting Up" on page 60.

SECTION 5 Live View Screen

The Live View interface is the primary camera viewing and monitoring mode. It can be configured to present video from the cameras configured in the system singularly or in multi-screen mode. The Live View screen can be configured to display up to 64 channels at the same time with options to display 1, 4, 6, 8 or more (depending on the NVR capacity) camera channels concurrently, or playback recorded video.



*Live View 2 * 2 multi-screen display*

Each camera channel displayed on the Live View screen may contain one, two, or no status icons in the upper-right corner of the viewing frame.

The recorder can support up to three monitors if it provides both VGA, HDMI, and CVBS video out ports.

5.1 Live View utility display

Open the Live View utility display by right-clicking anywhere on the Live View display shown above. Right click on the screen again to return to the normal Live View display. In the Live View utility display, you can:

- Access the Menu
- Open the Events list and play video of events.
- Backup video from a camera channel
- Logout, Shutdown or Reboot the system
- · Change the split screen configuration and assign camera channels to viewing frames
- Start and stop all-day continuous recording on all channels



5.1.1 Open Menu screen

In the screen shown above, click the **Menu icon** to open the firmware menu Menu icon display. Click on the icon in this window to open the configuration menus for that area of the system.



5.1.2 View alarm information

Click the alarm information icon to open the list of recent alarms, You can click the play icon in the list to watch recorded video associated with the alarm.
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PCamera 11	09-24-2018 1 Mot	on Det 🕨 🕨	D1 192 168 254 2	
PCamera 12	09-24-2018 1 Mot	ion Det	D1 192 168 254 2	
PCamera 13	09-24-2018 0 Mot	ion Det	D1 102.100.254.2	1 SH -
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Backup

Click the Backup icon in the Live View header bar to ... DEFINE HERE WHAT it is about To export these files:



SECTION 5: LIVE VIEW SCREEN

- 1. Insert a flash drive into an unused USB port on the recorder.
- In the Backup popup menu, click to select the files you want to backup, and then click the Settings icon. The Path Settings popup window will open.
- 3. In the Path Settings menu, open the Device field drop down list, and then select the USB flash drive.
- Double click on the folder in the drive where you want to backup files (see above). Use the buttons on this menu to create a New Folder or Format the drive if necessary.
- 5. Click **MP4** or **AVI** (for files in H.264 format only) to select the exported file format you prefer, and then click **OK** to export the file(s).

NOTE • You can hover the mouse cursor over any shortened file or directory name to reveal the complete name.

Power Off

Click the Power Off icon to Logoff, Shutdown or Reboot the system. See "SECTION 1 Systems Overview" on page 1

Change split screen configuration

- Click the Split icon (see above) to show split configuration options for the Live View screen.
- To re-position a camera in the screen, click on the video frame to highlight it (will be surrounded with an orange border) and then click on the camera channel in the left frame. Video from the camera will appear in (move to) the selected video frame.

Start and stop continuous recording

Click the camera icon in the footer to start or stop continuous recording on all channels.

5.2 Setting monitor resolution

The recorder supports VGA monitor resolutions up to 1080p (1920 x 1080 pixels), and HDMI resolutions up to 4K (3840 x 2160 pixels). To set the monitor resolution:

1. Open the General Configuration menu. Go to Menu | Configuration | General

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2	Live View	20	System Time	09.41.34	()	Output Stands	the		N	rsc		
0	R5-232		Device Name	Network Video F	25	Enable DST			8			
	POS		Device No.	266		DST Mode			* A	uto	Manual	
-			Auto Log out	Never		Start Time	- N6 -	24		du -	.2	00
(R)	System Service	80	Enable Wizard			End Time	No	14		50	2	100
			Enable Passwo	ord		DST Bas			-	O Menute	a	

Use the screen above to select the VGA/HDMI and HDMI2 resolutions for the VGA and HDMI monitors you are using, and then click the **Apply** button at the bottom of the screen.

5.3 Live View settings

Live View settings can be customized according to differing needs. You can configure the screen frame split, placement of camera channels on the screen, dwell time for screen to be shown, mute or turning on the audio, the screen number for each channel, etc.

1. Open the Live View Settings menu. Go to Menu | Configuration | Live View | General

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Channel ArgaN Verv ArgaN Channel-Zero P R5-232 II POS System Service >	- 5	Event Output Full Screen Mo	VGAHOME 10s	* *	
POS System Service					

Adjust the settings in the screen as needed:

 Video Output Interface: Designates the output to configure the settings for. Option includes only VGA / HDMI and HDMI2 if supported by the recorder.

SECTION 5: LIVE VIEW SCREEN

- Live View Mode: Designates the display mode (screen split) to be used for Live View. 1*1 is a single camera view.
 Other options are 2*2, 1+5, 1+7, 3*3, etc. Options depend on the number of channels supported by the recorder.
- Dwell Time: The time in seconds to dwell between switching channels when auto-switch is enabled in Live View.
- Enable Audio Output: Enables / disables audio output for the selected video output.
- Volume: When Audio Output volume is enabled, use the slider to adjust the volume.
- Event Output: Designates the output to show event video. Option includes only CVBS/Channel-Zero, VGA/HDMI, HDMI2 (if supported). NOTE: If you configure a camera event with the full-screen monitoring linkage action, the Event Output screen will show full screen video of the camera channel when the event occurs for the duration set in Full Screen Monitoring Dwell Time.
- Full Screen Monitoring Dwell Time: The time in seconds to show alarm event screen.
- 2. After changing settings in the screen shown above, click **Apply**, and then click **Back**.
- 3. Open the Live View View screen. Go to Menu | Configuration | Live View | View.



- 4. To use this screen:
 - a. Click the single- or multi-screen select icon for the screen split you prefer. In the example shown above, a 4-screen (2×2) view is selected.
 - b. Click a viewing screens (D1 or D2 or D3 ..), then double-click the camera in the list on the left that you what to show there. When the selection is made, label in the viewing screen changes to the camera channel number. You can also click an icon to Start or Stop Live view of all channels.
 - c. If you click the icon in the upper right corner of a viewing screen (D1 or D2 or D3 ..), the viewing screen number will change to a "+" symbol, and you can assign a network camera to that viewing position from the Live View display.
 - d. Click the Apply button to save your settings.

e. Right click on this menu to return to the Menu display. In the Live View display sown below, notice that the positions of the camera channels changed.



f. To add a network camera, click the "+" icon the lower right frame. Use the pop-up menu to add a network camera.

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- The dwell time of the live view configuration must be set before using Start Auto-switch.
- **NOTE** If the corresponding camera supports intelligent function, the Reboot Intelligence option is included when rightclicking the mouse on this camera.

5.4 Live View Status icons

In the Live view mode, icons can appear in the upper-right of the screen for each channel, showing the status of the record and alarm in the channel.

SECTION 5: LIVE VIEW SCREEN

lcon	Туре	Reason
	Alarm	This icon appears in the upper right corner of the live video stream. It results from video loss, video tampering, motion detection, sensor alarm, etc.
	Record	Manual record, schedule record, motion detection or alarm triggered record
	Record and Alarm	Both alarm and record status
	Event / Exception	For the occurrence of motion detection, sensor alarm or exception information. This icon appears at the lower-left corner of the screen. Click on the icon to display the event / exception reason.

5.5 Quick Setting Toolbar

Left-clicking the mouse on a viewing frame opens a Quick Setting Toolbar at the top or bottom of the frame.



Capture: Click to create a snapshot of the Live View image.

Instant Playback: Plays what was recorded in the previous five minutes. Nothing is played if a recording was not made at that time.

PTZ Control: If the camera supports PTZ control, clicking this icon opens the PTZ screen. See "SECTION 6 PTZ Controls" on page 77 for more information.

Digital Zoom: To use this feature:

- Click on the spot in the video image, and then use the mouse scroll wheel to zoom in or out at that spot.
- Right-click the mouse to cancel the zoom feature.

Audio mute / ON: Click this icon to enable or disable audio output. When audio is enabled, a volume control slider appears above the icon.

Live View Strategy: Use this feature to select Real-time, Balanced, Fluency. These features can improve the display of the camera channels.



Information: Hover the mouse over this icon to see the frame rate, bit rate, and resolution of the image.

Frame	23fps
Bitrate	7244Kbps
Resolu	2048×1536
Stream	H.264+

Start - Stop Manual Recording: Click to start, click again to stop manual recording of the camera channel.

Fisheye Camera warp correction: This feature is only available for cameras with fisheye functionality.

Switch to Sub (Stream): Hover the mouse over this icon to play sub-stream video. Repeat this action to return to the Main stream.

3D Positioning: Enable this feature to zoom in or zoom out of areas of the video frame. With 3D Positioning ON, drag the mouse cursor down and to the right over the area you want to zoom in on. Or, drag the cursor up and to the left over the area you want to zoom out of. Right click on the video frame to disable this feature.

Switch to Sub-Stream: Hover the mouse over this icon to play the sub-stream video. Repeat this action to return to the Main stream.

Trigger Alarm Out: Activates on the camera Alarm Out signal (from a camera with Alarm Out feature).

5.6 Channel-Zero Encoding

Use the Channel-Zero menu to configure the NVR for viewing multiple video channels simultaneously with a remote client. With this features you can decrease the bandwidth requirement without affecting the image guality. To use Channel-Zero Encoding:

1. Open the Channel-Zero Encoding menu. Go to Menu | Configuration | Live View | Channel-Zero

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© Q	Network Live View General View	Max: Bitrate()@	1792		
0 8 0	RS-232 POS System Sense	e e			
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- 2. Check the box to Enable Channel Zero Encoding.
- 3. Configure the Frame Rate, Max. Bitrate Mode and Max. Bitrate as needed.
- 4. Click Apply.

After setting Channel-Zero Encoding, you can see up to 16 channels of live video on one screen of the remote client.

5.7 Adding network cameras

IP cameras can connect to the NVR either through the 4-, 8-, or 16-port integrated Ethernet switch on the back panel of the NVR, or through the LAN the NVR is connected to. IP cameras connected to the IP ports on the NVR back panel are automatically added to the system by the NVR. Cameras that exist on the LAN can be added manually through the NVR startup Wizard or NVR firmware Camera menus.

The number of cameras connected to the ports on the back of the NVR plus the number of cameras on the LAN added to the NVR cannot exceed the camera limit of the NVR. For example, the ALI-NVR5232P NVR can monitor up to 32 cameras, 16 attached to the internal PoE network switch, and 16 accessible across the network.

NOTE For a lists IP cameras compatible with your NVR, refer to: "APPENDIX C NVR Compatible Cameras" on page 208.

Use the following guidelines to add a camera that was discovered on the LAN to the NVR. In the example below, an Alibi camera discovered on the LAN at IP address 192.168.3.3 will be added to NVR channel D4.

1. Open the IP Camera menu. Go to Menu | Camera | IP Camera.

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	D11 IP camera doe	D12 IP camera doe	D13 IP camera doe.	D14 IP camera doe	D15 IP camera doe
	-				
	Number of Unad				

Thumbnail view List view

2. Click the **List** button in the upper right corner.

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_	12000202		D5			PALA	192.168.254.6		
-	Privacy Mask		DB		*	NIA	192 168 254 7	100	
-	Video Parameters>		D7			NA	192 168 254.8		
			DB			NA	192.168.254.9		
Ð	Event >		09			NIA	192 168 254 10		
			D10			NIA	192.168.254.11	1.58	
			D11			1444	192.168.254.12		
			D12			NKA	192 168 254 13	00	
			D13			NIA	192.168.254.14		
			D14			NA	192.168.254.15		
			D15			NA	192 168 254 18		
			D16			NA	192.168.254.17		

Number of Unadded Online Devices

a. Click the **Number of Unadded Online Devices** button at the bottom of the screen (see above). A split list will open, with the upper list showing the cameras added to the NVR, and the lower list showing the cameras discovered on the network that can be added.

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b. In the screen above, check the select box(es) for the camera(s) you want to add, and then click the Add button. In this example, one camera was selected.

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c. Repeat sub-steps **a** and **b** above to add additional cameras. NVRs limit the number of network cameras you can add.

5.7.1 Custom Add IP Camera

The Custom Add feature provides a way to add network cameras to the NVR that have a different protocol, management port, transfer protocol, etc from Alibi cameras with default setup parameters. To use this feature:

- 1. Open the IP Camera menu. Go to Menu | Camera | IP Camera.
- Click the Custom Add button at the top of the window. The upper portion of the Add IP Camera (Custom) popup window lists network cameras that are accessible from the NVR.

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- 3. Scroll through the list of IP cameras, and then click on the one you want to add (see above).
- Open the Protocol drop down list and select the protocol to use with the camera. You can also define up to 16 custom
 protocols to use. You can also check the Use Default Channel Password select box if applicable.
- 5. Set the Management Port, if different than 8000 (default).
- 6. Open the **Transfer Protocol** drop down list and select the transfer protocol to use with the camera.

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17		OA	ctive	10.1.10.22	ALHPV303	ALIBI	
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19		© A	ctive	192.168	ALI-NP301	ALIBI	
PC	amera Ad	dress	192.1	68.3.74			
	Pre	otocol	ALIBI			14	
Ma	inagemen	t Port	8000				
Tr	ansfer Pro	otocol	Auto			-	
	User	Name	Auto				
	Past	sword	TCP				
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7. Enter the Administrator **User Name** and **Password** in the appropriate fields. You can also check the Use Default Channel Password select box at the bottom of the menu if appropriate.

dd IP (Camera (C	Custom)												
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8. Click **Add** to save your settings and connect the camera to the recorder.

SECTION 6 PTZ Controls

PTZ controls are used to control the Pan, Tilt and Zoom features of PTZ cameras. PTZ cameras can usually be configured to point at targets (called Presets), perform patrols (i.e., to move from Preset to Preset with a dwell time), and record and save patterns, a recording of the manually controlled motion of a camera. PTZ controls are also used with special features of non-PTZ cameras that have remotely controlled (motorized) zoom, focus and iris adjustments.



To open the PTZ Control screen, click the PTZ icon in the camera Quick-setting toolbar.



PTZ Control screen with field of view

SECTION 6: PTZ CONTROLS

The PTZ Control screen includes features to control your camera manually, and configure it to automatically scan the important surveillance targets it is installed to monitor, and quickly move to those targets on command. PTZ cameras supported by this firmware usually include three types of movement commands that should be configured to use your camera most effectively:

- Presets: Presets are easily configurable instruction sets that move when called move the camera to point at a specific surveillance target. Presets include direction, zoom, iris and focus setting, and may include other settings.
- **Patrols**: Patrols are composed of a string of presets, with a dwell time associated with each preset. For instance, when a patrol is executed, it moves the camera to point at the surveillance target of the first preset in the string, for a configurable dwell time (for instance 10 seconds), then it calls the next preset in the string to moves the camera to that target and stay there for its dwell time, etc. You can configure up to four (4) presets, called Patrol1, Patrol2, etc with this firmware.
- Pattern: A Pattern is created by recording the movement of the camera. You can then call the pattern you recorded to repeat
 the movement. You can record only one pattern (Pattern1) with this firmware.

NOTE The presets, patrols and patterns you configure must be supported by the PTZ protocol of your camera.

6.1 PTZ Control screen

You can open the PTZ Control panel in the **Live View** by left clicking on the image from the PTZ camera, and then click the PTZ icon on the Quick Settings toolbar (see above).



Click OK to close Wizard Zoom - Preset quick controls

In the screen shown above:

- Click the orange **OK** button to close the **PTZ Control Wizard** pop-up help window.
 - Check the **Do not show this** ... box to block this window when you open the PTZ Control screen.
 - You can drag your finger (for touch screens) or mouse across the screen as shown in the wizard to move the camera view
 after you close the help window:

- * Drag on the image to move the camera view in that direction.
- * Click in the image to focus automatically.
- Scroll the mouse up / down to zoom in / out.
- Click the lower right corner icon to set the preset.
- Click the \times in the upper right corner or right click on the video window to return to the **Live View** screen.

6.1.1 Pointing the camera

You can point the camera at a surveillance target in three ways:

- Dragging your finger (for touch screens) or mouse cursor across the video window in the direction you want the camera to
 move.
- Clicking any one of the eight (8) direction buttons on the control panel GUI to point the camera in that direction. You can set the speed at which the camera pans or tilts by clicking one of the speed buttons on the outer (orange) ring of the GUI.
- By programming a Preset to point the camera at a specific target, then "Call"ing that preset.

6.1.2 PTZ Control panel

Use the PTZ control panel that appears in the right frame to control motion of the camera, configure and call Presets, Patrols and Patterns, and quickly set the zoom, focus and iris.



SECTION 6: PTZ CONTROLS

Feature of the PTZ control panel include:

- Outer ring speed buttons: Click one of the seven (7) buttons to set the speed at which the camera moves when you click
 one of the eight (8) direction buttons.
- Continuous pan button: Click to start / stop continuous pan to the right.
- Open Aux Function, Patrol, Pattern control menus: Click the tab to open the menu for that feature.
- Quick action buttons: These buttons include:
 - Park (Quick Patrol): The camera initiates a patrol from Preset 1 to Preset 32 (if predefined) after the camera park time*. Undefined preset are skipped.
 - **Restore**: Resets the camera and loads its initial Factory image parameters.
 - Park (Patrol 1): The camera initiates a starts move according to the Patrol 1 after the camera park time*. Patrol 1 must be defined.
 - Park (Preset 1): The camera initiates a move to Preset 1 after the camera park time*. Preset 1 must be defined.
 - Linear Scan: Causes the camera to pan left and right between the limits of the Left border and Right border.
 - Left border: Use this button to set the left limit for a Linear Scan.
 - **Right border**: Use this button to set the right limit for a Linear Scan.
- **Close PTZ screen**: Click the × to return to the Live View screen.
- Inner ring speed buttons: Click repeatedly to move the camera in one of the eight (8) directions shown.
 - Aux Function tab shown includes icons to:
 - Turn on / off the **light** and **wiper**, if supported by the camera.
 - Begin **3D Positioning** mode. In this mode, you can drag a rectangle across any area of the video window to command the camera to center on that position. Small rectangles cause the camera to zoom in, large rectangles to zoom out (within the capabilities of the camera).
 - **Patrol** tab: Enables you to **Set**, **Call**, and **Stop** Patrols.
 - Pattern tab: Enables you to Record, Call and Stop a pattern (Pattern1).
- Open / close shortcut instructions: When open, provides a list of on-screen features of the PTZ video window.

* **Park Time**: Certain speed dome models can be configured to start a predefined park action (scan, preset, patrol and etc.) automatically after a period of inactivity (park time). The park time can be set only via the PTZ camera configuration interface. The default period is 5 seconds.

6.1.3 Zoom - Preset quick controls

Zoom – Preset quick control buttons are used to quickly zoom in or out, to set a preset and to OPEN and COLAPSE thumbnail views of presets that are configured (see below) and quickly move the camera to that view.





PTZ view with Preset thumbnails open

6.2 Configuring PTZ settings

Follow the procedure to set the parameters for control of a PTZ camera installed in the system. Setup of the PTZ parameters should be done before you control the PTZ camera.

NOTE If PTZ cameras are controlled through the RS-485 interface, check that the PTZ and the NVR are connected and configured properly. Use the instructions with the controller, and the OSD menus in the camera to configure PTZ settings.

1. To control or setup controls for a PTZ camera, click on the camera you want to control in the Live View interface, and then click the PTZ icon in the quick setting toolbar.



2. Click **OK** to lose the PTZ Control Wizard.

SECTION 6: PTZ CONTROLS

6.2.1 Setting Presets

A Preset is a pre-configured setting of a PTZ camera that usually includes, it's direction, zoom, iris setting and focus, and may include other settings. Follow the steps to set the Preset location which you want the PTZ camera to point to when an event takes place. A PTZ camera has up to 255 presets, numbered 1...255.



Some Presets are factory set, and should not be changed. Refer to the documentation for your PTZ camera to see which Presets you can configure. Additionally, the presets, patrols and patterns you configure must be supported by the PTZ protocol you use.

- 1. Open the PTZ Control Screen.
- 2. Click **OK** in the PTZ Control Wizard to close it.
- 3. Use the inner ring buttons on the PTZ motion control GUI to point the camera at the field of view you want to create a preset for.
- 4. Click the Set Preset button in the Zoom Preset quick controls panel.



- 5. Open the number field drop down list and select the number you want to use for the Preset (see above).
- 6. Click Apply.
- 7. Click **Preset** in the name field, and then use the virtual keyboard to enter a description for the preset you created. Click the Enter key in the lower right corner of the keyboard.



After saving your entry, the name will be shown in the thumbnail for Preset1.

Call preset - move to a preset

You can quickly move the camera to a preset you've created in two ways:

- Using Open Preset: Click the Open Preset icon in the Zoom Preset quick controls panel, and then click on the Preset thumbnail you want to advance to.
- Using the Set Preset panel: Click the Set Preset icon in the Zoom Preset quick controls panel, open the number field drop down list and select the number of the preset you want to advance to, and then click Call.

6.2.2 Setting patrols

Patrols can be set to position a PTZ camera to a Preset (KeyPoint) and hold it there for a set duration (in seconds) before moving on to another Preset number for a set duration. To create Preset positions for the camera, see "6.2.1 Setting Presets" on page 82. You can create up to 4 patrols, numbered 1...4. To create a Patrol:

- 1. Click the **Patrol** tab in the PTZ Control Panel.
- Open the drop down list in the Patrol field, and then select the patrol number you want to define (Patrol1 .. Patrol 4).



3. Click the **Set** icon.



4. Click the plus icon (+) to open the Keypoint menu. This menu is used to set a view in the patrol, with a specific duration.

In the KeyPoint menu:

- a. Open the **Preset** drop down list, and select the first camera view you want the patrol to move to.
- b. Open the Speed drop down list, and select the speed at which you want the camera to move there.
 - ii. Open the **Duration** drop down list, and use the slider to the right to select the number of seconds you want the camera to dwell on that preset. Click on that number in the **Duration** field.
- c. Click Apply. An entry will appear in the Patrol Settings list for the KeyPoint you created.
- d. Click the plus icon (+) to in the Patrol Settings menu to add an additional KeyPoint to the Patrol, and then repeat the sub-steps above with a different Preset to define the next camera view in the patrol.
- 5. When finished defining all the KeyPoints for the Patrol, click **Apply** in the Patrol Settings menu to save your settings.
- 6. Click **Cancel** to close the Patrol Settings menu.

Editing a patrol

In the Patrol Settings menu for the patrol you created:

- 1. Click the KeyPoint you want change.
 - a. To change the Preset number:
 - i. Click the Edit icon in the right column.
 - ii. Open the **Preset** drop down list, then select the preset you want to assign to the KeyPoint.
 - iii. Open the **Speed** drop down list, then select the speed at which you want to move to the preset.
 - Open the **Duration** drop down list, and use the slider to the right to select the number of seconds you want the camera to dwell on that preset. Click on that number in the **Duration** field.

- v. Click **Apply** in the KeyPoint menu.
- b. To change the order of the KeyPoints:
 - i. Click on the KeyPoint in the list you want to reposition.
 - ii. Click the up arrow or down arrow icon to change the position in the list.
 - iii. Click **Apply** in the KeyPoint menu.
- 2. Click Apply in the Patrol Settings menu.
- 3. Click **Cancel** to close the Patrol Settings menu.

Call patrol

To execute a Patrol you created:

- 1. Click the **Patrol** tab in the PTZ Control Panel.
- 2. Open the drop down list in the Patrol field, and then select the number of the patrol you created that you want to execute.
- 3. Click the **Call** icon. The patrol you selected will execute and repeat indefinitely.
- 4. To stop the Patrol, click the **Stop** icon.

6.2.3 Setting a pattern

A Pattern can be created by recording the movements of the camera. You can then call the pattern you recorded to repeat the movement. When recording the movements of the camera, you can Call the presets and patrols you created. Once **Call**ed, the pattern will execute continuously until it is stopped.

You can record only one pattern (Pattern 1). During the recording, an on-screen display shows how much memory allocated for the recording remains.

To define a pattern:

- 1. Click the **Pattern** tab in the PTZ Control Panel.
- 2. Click the **Record** icon.





- Move the camera using manual controls and/or by calling presets you created. You can record the motion of the camera until 0% of recording memory is left.
- 4. Click the Stop icon to halt the recording.

Editing the pattern

To edit the pattern, re-record Pattern1.

Call pattern

To execute the pattern you created, open the **Pattern** tab, and then click the **Call** icon.

6.2.4 Configure Linear Scan

Use Linear Scan to scan the field of view back and forth along a linear path between a "left limit" point and a "right limit" point. To use this feature, you must first define the Left Limit and Right Limit:

- 1. With the camera still (not executing any patrols or scans), manually point the camera to the left limit of the linear scan you want to define.
- 2. Click the Left Limit button on the PTZ Control panel.
- 3. Then manually point the camera to the right limit of the linear scan you want to define.
- 4. Click the **Right Limit** button on the PTZ Control panel.
- 5. Click the Linear Scan button to start and stop the scan. When the scan is stopped, you can point the camera up or down, and then click Linear Scan to scan the view at that elevation between the left and right limits.

6.3 PTZ Parameter Settings

Use the PTZ Parameter Settings menu to configure the communication settings and camera protocol for a PTZ controller connected to the recorder across an RS-485 network. To configure these parameters:

1. Click the PTZ Parameters button in the PTZ Control panel.

				PTZ Control	×
	PTZ Parameter S	ellinos			3
	Baud Rate	0000			
	Data Be				
Support and the local division of the local	Sitop Hir	(T	-	Aprilan Pa	trol Pattern
	Panty	None		Patent	
	Flow Ctrl	None		@ Re_ 0	Call () Stop
	PTZ Protocol	ALIBI		ParkQuick P.	Restore
2 255	Address	0	Y	Park(Patrol 1)	Park(Preset 1)
Charles and Carl and Carl	-	-144		Let border	Right border
			Cancel	Linear Scan	PTZ Paramet
I State I State					
	and the second second	212. Jak	- and	2	
1 Aible 2 Preset 2				Autors O	*

2. In the menu, select the parameters as needed to match the controller and camera, and then click **OK**.

SECTION 7 Point of Sale Integration

With the NVR POS (Point of Sale) feature you can overlay cash register transaction data onto a live video display. Currently only 16-, 32- and 64-channel NVRs support the POS feature. 16-channel NVRs support up to eight POS terminals, 32-channel NVRs support 16 POS terminals, etc. The Alibi recorder supports only plain text and XML data through the remote listening port.

Setting up POS is a two step process, performed in two different NVR menus:

- 1. Assign POS data to a camera
- 2. Configure the POS interface

7.1 Assign POS data to a camera

Do the following:

1. Open the POS Overlay menu. Go to **Menu | Configuration | POS | Overlay Channel**.

Click to open POS configuration menu

					c	Configu	iratio		1			æ .		ט
0	General		Select	+ Add	🕑 Ed	t × I	Del	D Enable	Disa					
ß	User		-	Ballins.	-	1	and a	Cold C	Late	The				
۲	Network	2	Re I	÷ {	-		A A	0 11						
a	Live View	->-1	D1	POS 1	D2	POS 2	D3	POS 3	D4	POS 4	D5		POS 5	
Ŷ	R5-232													
	POS			DOD R	07	BOR 7	150	DOC 8						
0	System Service	>		1030		-037	2.0	7038						

2. To add an existing camera to a POS system, hover the mouse over a camera thumbnail, then click the Edit icon. See above.



Notice in the mapping shown above, channel D3 is assigned to pos 3, etc.. by default. This indicates that data from POS assigned to POS 3 will be shown over the image in Channel D3. You can change this configuration, if needed, by selecting the POS identifier, and then selecting the cannel to assign data to.

3. If changes were mad in the screen above, click **Apply** to save the setting.

7.2 Configure the POS interface

Do the following:

1. Open the POS Overlay menu. Go to Menu | Configuration | POS.

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- Open the Select POS name drop down list, and then select the POS overlay you want to configure (see above). In this example, POS 3 is selected.
- 3. Check the **Enable** box to select this feature.
- 4. Select the Event Linkage tab, if not selected.
 - a. In the Normal Linkage column, select the actions you want to occur when POS data is available. For instance, if you want the monitor to expand to full screen when data is available, check the Full Screen Monitoring box.

	Configuration 🗸 🖽 🕛
 General User Nebwork 	Back Modify POS Enable POS Name POS 3 POS Prot Universal Protocol - Basic Connectio TCP Reception - Parar
🖉 Live View	> Channel Linkage and Display Arming Schedule Event Linkage
RS-232 RS-232	Full Screen Monit
() System Service	Audible War Local->2 D2 Send Email Local->3 -D3
	Local-54 D4
	Apply

- b. In the **Trigger Alarm Output** column, select the output alarms you want to activate when POS data is available.cClick **Apply** to save the settings.
- c. In the **Trigger Channel** column, elect one or more camera channels which will start to record/capture or expand to full-screen monitoring when the POS data available. Click **Apply** to save the settings.
- Click the Arming Schedule tab. In this tab you can define up to eight periods for each day when POS data is used. The periods must not overlap.

Edit								
Weekday	Mon							÷
Start/End Time	00:00	0-24:00				3		۲
Start/End Time	00	1	00	1	24		00	121
Start/End Time	00:0	0-00:00						۲
Start/End Time	00:0	0-00.00						O
Start/End Time	00.0	0-00-00						$\langle \overline{c} \rangle$
Start/End Time	00:0	0-00:00						۲
Start/End Time	00:0	0-00.00						۲
Start/End Time	00:0	0-00-00						۲
	Сору	1	Apply		OK		Cance	st

- a. Click the down arrow in the **Mon** field (see above) to setup the schedule for a different day, and/or click **Copy** to copy the Arming Schedule you setup in the window to other days of the week.
- b. Click Apply to save the settings.
- 6. Click a **Privacy Settings** field in the lower right corner of the **Modify POS** menu. **POS Privacy Information Filtering** allows you to hide additional information when a transaction takes place.

Linked Ch	(D3) Camera 01 ·	1	inked Ch	14 J	(D3)	Car	nera	01			*		
Character	Latin-1(iso-8859-1) -	0	Character		Latir	-1(i	so-8	859-	1)				
Overlay M	Page -	0	Overlay M		Pag	2					-		
Font Size	Large Medium Small	F	ont Size		Larg	e	ме	dium		Smi	ill.		
Font Color		F	ont Color	r [
Display fo	5	C	Display fo	- E	5						I		
Timeout(s)	⁶ For example, the entered c	ard T	imeout(s)		Сор	Y	T	Pas	te			
Privacy S	number will be shown as	E F	nivacy S.		i								
	or example, the ordered card number will be show			1	2	3	4	5	6	7	8	9	0
Display on	4	C	Display o	q	w	0	r	t	У	u	1	0	p
				a	s	c	1	fs		h	j I	ĸ	1
				0	z	x	c	v	b	n	m	1	×
				1231		1	-	-			D	1	5

a. Click an entry field, and then enter the label of the data you want to hide.

For example, a credit card number, except for the last 4 digits, is blocked by a POS system by default when sending data to the NVR. To block the entire number, enter **CardNum** in a privacy field shown above. The CC number shown in the report will then appear as **********. More information about this feature will be provided.

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7. In the POS menu (see below) do the following:



- Open the POS Protocol drop-down list, and select either Universal Protocol, EPSON, AVE or NUCLEUS whichever matches the register.
- b. Open the **Connection Type** drop down list, and then select the way the recorder is connected to the POS terminal.
- c. If you selected Universal Protocol, click the Advanced button to the right and then click Custom to view the communication tags options. Set the tags as needed for compatibility with your register. NOTE: Clicking the Advanced button changes the label to Basic.

Custom Settin	ngs		
Start Line Ident		Hex	
Line Break	ADOA	Hex	4
End Line Identi		Hex	
Case Sensitive	1.20		
Filtering Identifi	er		
Enable XML Pr			
		OK Ca	ncel

- d. If you selected **EPSON**, no additional parameters are needed.
- e. If you selected AVE, click the Set button to the right to open the AVE Settings window, and then select the Rule from the drop down list, and the Address to match the configuration of the register. The default Rule is VSI-ADD at address 0.

Custom Setting	3 5	
Rule	VSLADD	2
Address	0	

f. If you selected **NUCLEUS**, a restart is required. Follow the on-screen instructions to restart the recorder.

NOTE: NUCLEUS will set some POS configuration parameters to their default values.

g. Click the Settings button, and then set the Port number and Remote IP Address to match the register. The default port number is 10000. The actual port number you must use depends on the register being integrated. The pcAmerica register used in this example requires port 4201.

Port	1001	2			
Allowed Remote IP	192	0	. 0	. 64	

h. Open the Character Encoding drop down list and select the option that is compatible with the register. Refer to the your register documentation for the appropriate setting. NOTE: Alibi recorders support only plain text messages from the register.

Linked Ch	(D3) Camera 01	18
Character	Latin-1(iso-8859-1)	1
Overlay M	Latin-1(iso-0859-1)	
Font Size	Latin-2(iso-8859-2)	
Font Color	Latin-3(iso-8859-3)	
Display fo	Latin-4(iso-8859-4)	
Timeout(s)	Cyrillic(iso-8859-5)	
Privacy S.,	Arabic(iso-8859-6)	
	Greek(iso-8859-7)	
Display on	Hebrew(iso-8859-8)	
	Turkish(iso-8859-9)	
	Nordic(iso-8859-10)	

i. Select the Overlay Mode. Font Size, Overlay Time and Delay Time you prefer.

Small
off be also

- j. Check the **POS Overlay in Live View** box if you want messages from the register to appear over the camera image in Live View mode.
- k. Click on the **Color** you prefer for the overlay messages.
- 8. Click Apply to save your settings.
- 9. Click anywhere inside the Live View window, and then reposition or resize the message box as needed.

(Configuration	¢	e 🕹	ധ
<u>ම</u> ද	General User	< Back Modify POS Enable A POS Name PC POS Prot. Universal Protocol - Basic Connectio	IS 3 P Reception		Param
•	Network	> Channel Linkage and Display Arming Schedule Event Linkage			
Q Q	RS-232	Linked Ch [D: Character Lat	I) Camera 01 in-1(iso-8869-1)	•	
8	POS System Service	> Overlay M. Pa	je ge Medium	• Smat	
		Display fo 5 Timeout(s) 5]
		Privacy S	ple, The entered card ments	or will be show.	3
		Display on>			

 Click the Get Text button at the bottom of the window (see below) to start retrieving messages from the register. The Get Text button changes to a Stop Getting button.



- 11. Verify that when transactions occur at the POS terminal, overlay text appears in the Live View image and the field below it.
- 12. Click the Stop Getting button to disable this test feature.

7.3 Playback POS recordings

When the POS setup is configured to record video when messages are received from the register, you can use **Custom Playback** - **POS Event** search features to find the video coupled with message strings received from the register. In the example below, a search is made for register events where "water" was purchased.

To playback video with specific POS register messages, go the following:

- 1. Open the Playback menu. Go to Menu | Playback.
- 2. Click the Custom Search button, and search for POS Events.

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		F	🥭 d	<u>ں</u> ،				
Search Condition	Time Tag Event Type Piate No. Area/Country	Custom All Gathering Fast Moving Parking Unattended Baggage Object Removal Audio Loss Exception Sudden Change of Sou Defocus Sudden Scene Change PIR Alarm Fire Source Detection Temperature Detection	- 201 File	8-10-17 0	0.00.00 🖃	2018-10-17 23:	59:59	
E.o.r	1 C	POS Event		ndition	s đ	Search	Save	

- 3. Configure the search screen as needed, and then click the Search button. See "8.6.5 Custom Playback" on page 118 for more information.
- 4. Click the **Search** button. Results of the search will appear in the right panel.
- 5. Select the search result you want to play, and then click the **Play** icon associated with the search result.



SECTION 8 Record, Playback and Video Backup

After the initial setup of your NVR using the Wizard, the Menus interface enables you to refine your configuration settings and expand the functionality of the system. To use most menus, the user must log into the NVR system, either locally or remotely, with administrative privileges.

8.1 Configuring record settings

8.1.1 Setting camera video parameters

Video parameter values provided in these menus are dependent on the capabilities of the camera model.

1. Open the camera main stream parameters menu to configure the encoding parameters. Go to Menu | Camera | Video Parameters | Main Stream Pa.....

G Camera >	E Camera (D1) AL	Camera [D1] ALI-NP3013RH -							
	Encoding Parameters	Main Stream(Continuos	us)	Main Stream(Event	0				
Display Configu.	Stream Type	Video		Video					
B Privacy Mask	Resolution	2048*1636(3MP)	1	2048*1530(3MP)					
Video Parameter	Etrate Type	Variable		Varialite					
	Video Quality	Highest	14	Highest					
Main Stiram Pa	Frame Rate	22fps		22fps	(#)				
Sub-Stream	Max. Bitrate Mode	Castom(32-18384)		Custom(32-10304)					
Event >	> Max: Bitrate(Popps)	5483		5481					
	Max. Bitrate Range Recomm	nended 8448-14080(Htps:)		8448~14080(Https)					
	Video Encoding	H-264		H 264					
	Enable H 264+	10							
	Provide Sector								
	Copy to								

The Main Stream refers to the primary stream that affects data recorded to the hard disk drive. It directly determines the recording quality and image size. Main stream recording can provide a higher quality video with higher resolution and frame rate than sub-stream recording. Parameters are described as:

- Frame Rate (FPS Frames Per Second): refers to how many frames are captured each second. A higher frame rate is
 advantageous when there is movement in the video stream, since it maintains a higher image quality throughout.
- Resolution: Image resolution is a measure of how much detail a digital image can hold: the greater the resolution, the
 greater the level of detail. Resolution can be specified as the number of pixel-columns (width) by the number of pixelrows (height), e.g.,1024×768.
- Bitrate: The bit rate (in kbit/s or Mbit/s) is often referred to as speed, but actually defines the number of bits/time unit and not distance/time unit.

- Enable H.264+ (or H.265+) Mode: The H.264+ (or H.265+) mode helps to ensure high video quality with a lower bitrate. It reduces the network bandwidth requirement and HDD storage space.
- 2. In the menu shown above:
 - a. Open the **Camera** drop down list, and then select the camera you want to configure.
 - b. Adjust the main stream parameters as needed.
 - c. Click Apply.
 - d. Click the **Copy to** button to copy your settings to other cameras on your system. Follow the on-screen menu to perform the copy.
 - e. Click Apply when finished.
- 3. Open the camera sub-stream parameters menu to configure the encoding parameters. Go to Menu | Camera | Video Parameters | Sub-stream.

		Camera	
Camera	Camera [D1] ALI-NP3	013RH -	
Display Configu	Stream Type	Video & Audio -	
C Privacy Mask	Resolution (Max: 720P)	352*240(CIF) -	
	Bitrate Type	Variable -	
	Video Quality	Medium +	
Main Stream Pa	Frame Rate	Full Frame +	
Sub-Stmam §	Max. Bitrate Mode	Oeneral -	
Event	Max. Bitrate (Pops) (Max. 2M)	512 -	
	Max. Bitrate Range Recommende	d 384-640(Hbps)	
	Video Encoding	H.264 +	
	Copy to		

The Sub-stream refers to the secondary stream that affects data recorded to the hard disk drive. It directly determines the recording quality and image size where sub-stream video is recorded or displayed, especially on smartphone live video streaming. Sub-stream recording can provide a nominal quality video with a lower resolution and frame rate requiring less network bandwidth than main stream recording. Parameters are described above:

- 4. In the **Sub-stream** menu shown above:
 - a. Open the **Camera** drop down list, and then select the camera you want to configure.
 - b. Adjust the main stream parameters as needed.
 - c. Click Apply.
 - d. Click the **Copy to** button to copy your settings to other cameras on your system. Follow the on-screen menu to perform the copy.
 - e. Click Apply when finished.

5. Repeat steps 1 through 4 above for each camera on your surveillance system.

8.2 Configuring Record schedule

The record schedule can be used to automatically start and stop recording at preset times. Initially, cameras are configured to record either continuously or using motion detection. Managing the record schedule for each camera can save space on the HDD and help the recorder operate more efficiently.

You can setup a record schedule in either of two ways: graphically, where you apply recording modes to sections of the week array (Monday through Sunday \times 0 through 24 hours) and by using the Edit menu to more accurately define what mode of recording occurs and when. You can intermix the graphical method and edit method to configure any camera, and you can define up to 56 different recording segments during a week. The weekly schedule you setup will repeat every week unless changed.



The recording schedule you setup will repeat every week indefinitely unless it is changed. You can also set up a special recording schedule for Holidays, and a separate image capture schedule.

 Open the Record Schedule menu. Go to Menu | Storage | Recording Schedule. Note that the schedule shown below is setup to record on motion detection only throughout the week.

				Sto	rage						æ	
Recording Solve	Camera No. Enable Sche	ci) dule -	I] ALI-NP30	1384								
Storage Device												Advance
Electron Marte	Conti	Eve	nt. 🔳 M	otion 📕	Alarm	MIA		M&A	PO	s	None	Edit
, ourage more	0	2	4 6	8	10	12	14	16	18	20	22	24
Advanced	Mon Mon											
	Tue							100				2
Holiday	Wed											3
	Thu Maria							100				4
	Fri Tall			-								6
	Sat											6
	Sun III							1000			100	7
	Sun	1										
	c	opy to										

- 2. To configure the Record schedule:
 - a. Open the **Camera No**, drop-down list to select the camera you want to configure.
 - b. Check the Enable Schedule box.
 - c. Click the Advanced button.

Record Audio:	22	
Pre-Record:	6s	
Post-Record	5s	
Stream Type	Main Stri	•
Video/Picture Expi	0	

In the Advanced Parameters menu:

- i. Check the **Record Audio** box if applicable.
- ii. Set the **Pre-Record** and **Post-Record** times using the drop down lists. These parameters set the number of seconds of video before and after an event occurs what will be saved in storage.
- iii. Open the **Steam Type** drop down list to select the video stream you want to record. You can select Dual, but that requires more bandwidth and storage space.
- iv. Set the Video/Picture Expiry parameter as needed. This parameter sets the expired time for a recorded file to be kept in the HDD. When the deadline is reached, the file will be deleted. If you set the expired time to "0," the file will not be deleted. The retention time for a file is determined in consideration of the capacity of the HDD.
- v. Click **OK** to save your settings.

Setting the Recording Schedule graphically

To graphically configure the recording schedule, simply drag a rectangle across the areas of the array you want to change, and then click the recording mode you want to apply to that area. Each segment of the array represents 30 minutes. To graphically change the recording schedule:

Use the mouse to drag a rectangle across the area of the schedule you want to change. A red rectangle will show the area you
selected. In this example, the period from 7 AM to 6 PB, Monday through Sunday was selected.

					Sto	rage						÷	± (
Recording Solie	Camera No		[D1] AL	NP3013RH	4									
Capture Schedule	Enable Sch	edule -												
Storage Device													Advanc	200
	Conti		Event	Motion		Alarm	MIA		M&A	PO	6	None	Edit	t.
Storage Mode	0	2	4	6	8	10	12	14	16	18	20	22	24	
Advanced	Mon mail		1	-	-	-			-	-				1
	Tue E													2
Holiday	Wed													3
	Thu Ball	-												4
	Fri 📃									-		100		6
	5.4													6
	Sun 📰							-				-		7
	-					*****				- C				
	*Note: Oper	abon is	invalid w	nen the nun	nberk	if brive se	gments exc	eeds t	he limit (8	2				
2. Click on the recording mode buttons above the array to change the mode in the rectangle. Mode buttons include:

Continuous: scheduled recording.
Event: recording triggered by all event triggered alarm.
Motion: recording triggered by motion detection.
Alarm: recording triggered by alarm.
M/A: recording triggered by either motion detection or alarm.
M&A: recording triggered by motion detection and alarm.
POS: recording triggered by Point of Sale (POS) and alarm.

In this example, Event (purple code) recording was selected.

						rage							
	Recording Solie	Camera No Enable Sch	edule -] ALI-NP3013	RH								
n.	Storage Device	Cont	Ever	t 📰 Mote	on 📕	Alarm	MIA		M&A	POI	а. Г	None	Advanced Edit
3	Storage Mode	0	2 .	6	8	10	12	14	16	18	20	22	24
9	Advanced Holiday	Mon Tue VVed Thu Fri Sat Sun											1 2 3 4 5 6 7
		*Note: Oper	ation is inva Copy to	lid when the o	umber o	f time se	privents exc	eeds !	the limit (8)			

3. Repeat steps 1 and 2 above for each recording mode you want to apply, and for each camera.

Setting the Recording Schedule using Edit

You can use the edit method to define up to 8 recording periods for each day of the week (56 maximum). A schedule you setup for one day of the week can be copied to any other day of the week. Each time segment in **Edit** is 15 minutes in length.



You can define up to eight recording time periods for each day, each with a specified recording type. Recording time periods cannot overlap with each other.

To setup a recording schedule using Edit:

1. In the Record Schedule menu, click the **Edit** button.

		Storage					
Recording Sche	Camera No. Edit	[D1] ALI-NP3013RH	+				
Capture Schedule	Weekday	Mon			4		
, Storage Device	All Day		Type	Continuous	•		Advanced
7) Electron Monte	StarbEnd Time	00100524000	· Type	Motion	-	None	Edit
3) oronage mode	Starb/End Time	05 00	101 24	00	141	0 22	24
Advanced	Start/End Time	00.00-00.00	Type	Continuous	-		
Holiday	Start/End Time	00.00-00.00	· Type	Continuous	-	-	
	Start/End Time	00.00-00.00	💿 Туре	Continuous	•		4
	Start/End Time	00 00-00 00	Type	Continuous		tion and the	6
	Start/End Time	00.00-00.00	 Type 	Continuous			6
	Start/End Time	00 00-00 00	 Type 	Continuous			
		Copy Apply	OK	Cancel	-1		

In the **Edit** menu:

- i. Open the **Weekday** drop down list, and select the day you want to configure.
- ii. To schedule all-day recording, check the box for All Day recording, and then open the **Type** drop-down list to the right to select the recording mode.

NOTE *Alarm triggered recording is available for only some cameras models supported by the Alibi NVR. Consult your vendor support organization for more information.*

iii. To setup specific start and end times, click the time field on the first **Start/End Time** line to open a time setting popup window.

Weekday	8	ton				
All Day				Type	Continuours	•
Start/End Time	20500004000		۲	Туре	Motion	
Start/End Time	06 1 12	00	4	24	00	14
Start/End Time	00 00-00 00			Туре	Continuous	
Start/End Time	00 00-00 00			Туре	Continuous	
Start/End Time	00.00-00.00			Type	Continuous	
Start/End Time	00 00-00 00			Туре	Continuous	
Start/End Time	00 00-00 00		œ	Туре	Continuous	
Start/End Time	00 00-00 00			Туре	Continuous	
	Copy	Apply		OK	Cancel	

- Use the up/down arrow buttons for each time file to set the hour and minute value start time and end time of the recording period you are configuring. In the example above, 05:00-24:00 was selected.
- Open the **Type** field drop down list to select the type of recording mode you want to apply during that period.

Weekday		Mon			
All Day				Туре	Continuours
Start/End Time	05:00-24:00			Type	10000
Start/End Time	00.00-00.00			Туре	Continuous
Start/End Time	00:00-00:00			Type	Mobon
Start/End Time	00.00-00.00			Type	Alarm
Start/End Time	00.00-00.00			Туре	Motion Alarm
Start/End Time	00 00-00 00			Type	Motion & Alarm
Start/End Time	00.00-00.00		٢	Туре	Event
Start/End Time	00:00-00:00			Туре	POS Event
	Copy	Apply		OK	Cancel

- Click **Apply** to save your settings.
- To set additional recording mode segments, repeat the method above for the additional 7 time segments for the day you selected as needed.
- Click **Apply** to save your settings.
- Click the Copy to button at the bottom of the window to select other days of the week and copy that schedule to them. In the Copy to menu, Monday is day 1 and Sunday is day 7.

			Stor	age				
Recording Sche	Camera No. Copy to	[D1] AL	I-NP3013RH	-			-Y	
C Capture Schedde	- 54	≈1 ×6	~ 2 ~ 6	-3 -7	⊘4 DK ∖	Cancel	0 22	Advanced Edit 24 1 2 2 4 6 6 6 7
	Co	py to		82 - E				

- Click **OK** to close the **Copy to** menu.
- Click Apply to save your settings.
- Repeat the steps above in the Edit menu for each day of the week, or use the graphical method.
- i. Click **OK** to close the **Edit** menu.
- 2. Click **Apply** in the Recording Schedule menu.
- 3. Repeat the steps above for each camera.

8.3 Configuring Capture schedule

The Capture schedule is used to configure when capture files are saved to storage. You can setup a Capture schedule in either of two ways: graphically, where you apply Capture modes to sections of the week array (Monday through Sunday \times 0 through 24 hours) and by using the Edit menu to more accurately define what mode of Capture occurs and when. You can intermix the graphical method and edit method to configure any camera, and you can define up to 56 different recording segments during a week. The weekly schedule you setup will repeat every week indefinitely unless changed.



The Capture schedule you setup will repeat every week indefinitely unless it is changed. You can also set up a special recording schedule for Holidays, and a separate image capture schedule.

 Open the Capture Schedule menu. Go to Menu | Storage | Capture Schedule. Note that the schedule shown below is configured for no capture recording (None).

1	Recording Sche	Camera No	1	[[01]/	LI-NP3013R	•	-						
ð	Capture Scheckler	Enable bor	eduk										
1	Storage Device			6,530		-	- 030	3	1105105				Advance
2	Storage Mode	Conti.		Event	Motion	Alam	MIA	-	M&A	No	ne		Edit
		0	2	4	6	8 10	12	14	16	18	20	22	24
3	Advanced	Mon											1
a.	Holiday	Wed											
		Thu											
		Fri											5
		5.46											6
		Sun											7
		*Note Ope	ration	is invalid	when the nur	mber of time	segments ex	ceeds	the limit (8	ŋ.			
			Сору	to									

- 2. To configure the Capture schedule:
 - a. Open the Camera No, drop-down list to select the camera you want to configure.
 - b. Check the Enable Schedule box.
 - c. Click the **Advanced** button.

Parameter T. Continuous Event Terestadom 7041480(cf - 7041480(cf - Pitcher Guada Madum - Hother Guada Madum - Interval 8 s - 8 s - Capture Del. 0s -	Novanced Param	vecers			
Resolution 704*480(4t - 704*480(4t - Picture Quality Medium - Medium - Interval 9s - 3s - Capture Del. 0s - -	Parameter T	Continuou	6	Event	
Picture Guality Medium - Medium - Interval 3s - 3s - Capture Del., 0s -	Resolution	704*480(4	-	704*480(44	-
nterval 3s - 3s - Capture Del Os -	Picture Quality	Medium		Medium	
Capture Del Os -	Interval	35	.+	35	
	Capture Del	01			
	Capture Del	01			
				THE OWNER WATCHING THE OWNER WATCHING	_

In the Advanced Parameters menu, you can configure the parameters for:

- Open the **Resolution** drop down lists for Continuous and Event, and select the resolution of the picture you want to capture.
- ii. Open the **Picture Quality** drop down lists for Continuous and Event, and then select either **Low**, **Medium** or **High** picture quality. Higher picture quality results in more storage space requirement.
- iii. Open the **Interval** drop down list and select the interval of capturing live picture.
- iv. Open the **Capture Delay Time** drop down list and select the duration for capturing pictures.
- v. Click **OK** to save your settings.

Setting the Capture Schedule graphically

To graphically configure the Capture schedule, simply drag a rectangle across the areas of the array you want to change, and then click the Capture mode you want to apply to that area. Each segment of the array represents 30 minutes. To graphically change the Capture schedule:

3. Use the mouse to drag a rectangle across the area of the schedule you want to change. A red rectangle will show the area you selected. In this example, the period from 12 AM to 5 AM, Monday through Sunday was selected.

Recording Sche	Camera No		[D1] A	LI-NP3013R	4	•						
Capture Schedule	Enable Sch	vedule -										
3, Storage Device	-	-	1.5.02	-		-		1000	-	252		Advance
Storage Mode	Cont.	2	a	Motion 6	Alarm	12	14	16	18	-20	- 22	24
) Advanced	Mon Tue VVed Thu Fri Sat Sun											1 2 3 4 5 6 7
	*Note: Ope	ration is	anvalid v	when the nur	%	egments ex	ceeds !	the limit (8).			

4. Click on the Capture mode buttons above the array to change the mode in the rectangle. Mode buttons include:

Continuous: scheduled capture mode. Event: capture triggered by all event triggered alarm. Motion: capture triggered by motion detection. Alarm: capture triggered by alarm. M/A: capture triggered by either motion detection or alarm. M&A: capture triggered by motion detection and alarm. None: no captures taken. In this example, Continuous (green code) recording was selected.

Recording Sche	Camera No. [D1] ALI-NP3013RH - Enable Schedule -		
Storage Device		2	dvanced
Storage Mode	Contil Event Motion Alarm MijA M&A Hone	- 22	EOR
) Advanced	Mon Tur Vived Thu Fin Cut		1 2 3 4 5 6 7

5. Repeat steps 1 and 2 above for each capture mode you want to apply, and for each camera.

Setting the Capture Schedule using Edit

You can use the edit method to define up to 8 recording periods for each day of the week (56 maximum). A schedule you setup for one day of the week can be copied to any other day of the week. Each time segment in **Edit** is 15 minutes in length.



To setup a recording schedule using Edit:

6. In the Record Schedule menu, click the **Edit** button.

. 600	Recording Sche	Camera No. Edit	[D1] ALI-NP3013	RH						
Ð	Capture Schedule	Weekday		Mon				14		
a,	Storage Device	Al Day				Туре	Continuous			Advanced
5	Storage Mode	Start/End Time	00.00-24.00		0	Type	Motion	-		Edit
	Sector of the sector of	Start/End Time	00	1 00	141	24	00	180	22	24
9	Advanced	Start/End Time	00.00-00.00	10		Туре	Continuous	-		1
8	Holiday	Start/End Time	00 00-00 00	1)		Type	Continuous		-	3
		Start/End Time	00 00-00 00	1)	۲	Туре	Continuous	•	-	4
		Start/End Time	00 00-00 00	1.2		Туре	Continuous		-	6
		Start/End Time	00.00-00.00	12		Type	Continuous			6
		StarbEnd Time	00-00-00.00	1	۲	Туре	Continuous	-		8
			Copy	Αρργ		OK	Cancel	-1		

In the Edit menu:

- i. Open the **Weekday** drop down list, and select the day you want to configure.
- To schedule all-day capture mode, check the box for All Day, and then open the Type drop-down list to the right to select the capture mode.
- iii. To setup specific start and end times, click the time field on the first **Start/End Time** line to open a time setting popup window.

81 00	() ()	Type Type 24	Continuous Motion	•
<u>eií</u> 00	() ()	Type 24	Motion	
<u>81</u> 00	-0-1	24	Lei co	
			191 00	1.80
		Type	Continuours	
		Туре	Continuous	
		Type	Continuous	
		Туре	Continuous	
	œ	Туре	Continuous	
		Type	Continuous	
			 Type Type Type Type Type Type Type 	Type Continuous Type Continuous Type Continuous Type Continuous Type Continuous Type Continuous Type Continuous

- Use the up/down arrow buttons for each time file to set the hour and minute value start time and end time of
 the capture mode period you are configuring. In the example above, 05:00–24:00 was selected.
- Open the **Type** field drop down list to select the type of capture mode you want to apply during that period.

Weekday		Mon		
All Day			Type	Continuous -
Start/End Time	05:00-24:00		Туре	MARCHINE AN
Start/End Time	00:00-00:00		Туре	Continuous
Start/End Time	00 00-00 00		Type	Motion
Start/End Time	00:00-00:00		Type	Alarm
Start/End Time	00 00-00 00		Type	Motion Alarm
Start/End Time	00 00-00 00		Туре	Motion & Alarm
Start/End Time	00 00-00 00		Туре	Event
Start/End Time	00.00-00.00		Туре	Continuous +
	Copy	Apply	OK	Cancel

- Click **Apply** to save your settings.
- To set additional recording mode segments, repeat the method above for the additional 7 time segments for the day you selected as needed.
- Click Apply to save your settings.
- Click the Copy to button at the bottom of the window to select other days of the week and copy that schedule to them. In the Copy to menu, Monday is day 1 and Sunday is day 7.

Copy to					
Se	10.1	-2	~ 2	- 4	
	- 6	-6	-7		
			-	-	

- Click OK to close the Copy to menu.
- Click Apply to save your settings.
- Repeat the steps above in the **Edit** menu for each day of the week, and for each camera.
- i. Click **OK** to close the **Edit** menu.
- 7. Click **Apply** in the Capture Schedule menu.
- 8. Click **OK** to close the Edit menu.
- 9. In the Capture Schedule, click Apply.
- 10. Repeat the steps above for each camera.

8.4 Defining Holidays

You can create a recording schedule for holidays only after specifying which days are holidays. Holidays can be specified by day (of the year), week or month. When these holidays occur, the Holiday recording schedule will be performed instead of the normal Monday through Sunday recording schedule setup using the procedure above in "8.2 Configuring Record schedule" on page 99.

To specify which days are holidays and create a recording schedule for these days, do the following:

1. Open the Record Holiday menu. Go to Menu | Storage | Holiday.

			and state and a			
Recording Sche	_					
Cantura Scherbila	No.	Holiday Name	L Stabus	Start Date	End Date	L Edt
		Fallow Variana Chay	Disabled	1.399	1 Jon	
E. Storage Device	3	Holiday2	Disabled	1_Jan	1 Jan	
	3	Holiday3	Disabled	1 Jan	1 Jan	
Storage Mode	-4	Holiday4	Disabled	1 Jan	1.Jan	
	5	Holiday5	Disabled	1 Jan	1 Jan	
Advanced	6	Holiday®	Disabled	1.Jan	1.Jan	
m roaday i	7	Holiday7	Disabled	1.Jan	1 Jan	
	8	Holiday8	Disabled	1.Jan	1 Jan	
	9	Holiday9	Disabled	T.Jan	1.Jan	
	10	Holiday10	Disabled	1 Jan	1.Jan	
	-11	Holiday11	Disabled	1.Jan	1.Jan	
	12	Holiday12	Disabled	1.Jan	1 Jan	
	13	Holiday 13	Disabled	1 Jan	1.Jan	
	14	Holiday14	Disabled	t-Jan	1 Jan	18
	15	Holiday15	Desabled	1.Jan	1 Jan	
	10	Holiday18	Disabled	1_Jan	1 Jan	

- III Re Capture Sch Edt IL Storage Device 1 Jan Enable 🗄 Storage Mode 1.Jan Holiday Na 1 Jan (a) Advanced ByN Mode 1.Jan Jan Start Date 1.Jan . End Date 1.Jan 1.Jan 10 1.Jan 11 1.Jan 12 1.Jan Cancel 13 1.Jan 1.4 Holiday14 This shiped 1.100 15 Holiday15 Disabled 1.Jan 1.Jan Holiday16 Disable 1.1an 1_Jan
- 2. Click on the Edit icon for the first entry in the list. You can define up to 31 different holidays periods.

- 3. In the Edit window, click the Enable box to check it.
- 4. Click on the Holiday Name field, and then enter a common name for the holiday.

6789 9 y u i o 9 h j k	0
© 6789 yuio ghjk	0
6789 yuio ghjk	0
g h j k	
ghjk	P
	Ю.
bnm	•
d d e	4
b	

- Open the Mode drop down list and select either By Date, By Week or By Month. Depending on your selection, the Start Date and End Date fields will adjust accordingly.
- 6. Edit the **Start Date** and **End Date** fields as needed. A Holiday can be a single day or range of days. In the window below, a New Years Day holiday was specified.
- 7. Click **Apply** to save your setting, and then click **OK**. The Holiday Settings window will show the holidays you created.

			Storage		8	A A C
Recording Sche						
	No.			Start Date		
Capture Schedule	1					
D. Browne Presses	2	Holiday2	Disabled	1_Jan	1.Jan	
and outside mence	з	Holiday3	Disabled	1.Jpn	1 Jan	
Storage Mode	-4	Holiday4	Disabled	1.Jan	1.Jan	
	5	Holiday5	Disabled	nuc.t	1.Jan	
Advanced	6	Holidayth	Disabled	1.Jan	1.Jan	
Rill Holder	7	Holiday7	Disabled	1.Jan	1.Jan	
	8	Holiday8	Disabled	1 Jan	1.Jan	
	9	HolidayB	Disabled	1.Jan	1.Jan	
	10	Holiday10	Disabled	1_Jan	1.Jan	
	11	Holiday11	Disabled	1.Jan	1.Jan	
	12	Holiday12	Disabled	1.Jan	1.Jan	
	13	Holiday 13	Disabled	1.Jan	1.Jan	
	14	Holiday 14	Disabled	t-Jan	1 Jan	
	15	Holiday15	Disabled	1.Jan	1 Jan	
	10	Holiday10	Disabled	1 Jan	1.Jan	

- 8. Repeat steps 2 through 7 above for other holidays you want to identify.
- 9. Open the Record Schedule window. Go to Menu | Storage | Record Schedule.

Weekday		Mon		-
All Day	13	Mon		
Start/End Time	00.00-24 00	Tue		
Start/Erell Time	00 00-00 00	Wed		
Start/End Time	00.00-00.00	Thu		
Start/End Time	00.00-00.00	Fri		
Start/End Time	00.00-00.00	Set		
Start/End Time	00-00-00 0	Sun		
StatlEnd Time	00.00-00.00	Holiday.		
Start/End Time	00.00-00.00		(ii) Type	Continuous
	Conv	Acch	OK	Cancel

10. Use the procedure in "8.2 Configuring Record schedule" on page 99 to setup a recording schedule for Holidays.

8.5 Record Advanced settings for eSATA port

Use the Record Advanced Settings menu to configure the purpose of the storage device connected to the eSATA port.

1. Open the Storage Advanced menu. Go to Menu | Storage | Advanced.

			Storage	Ą	Ċ
	Recording Sche.	Overwrite eSATA Usage	eSATA1 - Record/Capture -		
d 63	Storage Device Storage Mode	Enable HDD Sleeping	8		
() ()	Advanced Holiday	Enable Send HDD Information	×		
		Apply			

- 2. Click the Enable box to check it.
- 3. Open the Useage drop down list, and then select either Export or Record/Capture.
- 4. Click Apply to save your settings.

8.6 Playback

You can playback recorded video files instantly, or in several ways through the Playback menus.

When playing back recordings with the Playback menu, you can tag files for identification and easy retrieval.

Multi-channel playback supports 4 channels at up to 8 MP resolution and 16 channels at up to 1080p resolution.

8.6.1 Instant playback by channel

In Live View mode, click the channel you want to playback, then click the playback icon on the **Quick Setting** toolbar. In the instant playback mode, only recordings made during the previous five minutes on the channel are played.

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To cancel instant playback mode, right click on the screen.

NOTE In Live View mode, you can click the Start/Stop Manual Record icon to instantly record a video clip.

8.6.2 Using the Playback screen

Use the Playback screen to find and replay video recordings. You can synchronously playback up to 16 video streams at a time. Three playback modes are available:

- Normal: Normal playback shows and plays back all video clips recorded from the selected camera on the selected day.
- Smart: Smart playback is useful with continuous video recordings for quickly finding recorded video that has object motion, object line crossing or object intrusion in any part the video frame. You can select the kind of motion to find and mark it anywhere in the frame. The recorder will make search recorded video to show video clips that match your search criteria. This mode only allows single channel playback.
- **Custom**: Custom mode is used to search for video clips recorded as a result of a specific alarm or event.



Playback screen

Time panel (calendar)

Toolbar

SECTION 8: RECORD, PLAYBACK AND VIDEO BACKUP

Toolbar



Notes:

- Legend: Legend defines the type of video clips marked on the timeline
- Fisheye Expansion: For fisheye cameras, these icons display video in the modes supported by the camera. Hover the mouse
 over the fisheye icon to open the list of options. See below.



- 180° Panorama: Switch the Live View image to the 180° panorama view.
- **360° Panorama**: Switch the Live View image to the 360° panorama view.
- PTZ Expansion: The PTZ Expansion is the close-up view of some defined area in the fisheye view or panorama expansion. It supports electronic PTZ (e-PTZ).
- Radial Expansion: In radial expansion mode, the entire wide-angle view of the fisheye camera is displayed. This view
 mode is called Fisheye View because it approximates the vision of a (fisheye) convex eye. The lens produces curvilinear
 images of a large area, while distorting the perspective and angles of objects in the image.
- Play Controls: Use the Play Control buttons to speed up, slow down, reverse, etc. The Speed icon shows the speed factor.



- Show sub-periods: Use this feature to divide play long video files into 4 segments and play them concurrently in a 2×2 split window (four frames) within the video playback window. For instance, if you are playing a video file that is 2 hours long, the file will be divided into four 30 minute segments, and each segment will play concurrently in a one of the 4 frames.
- **Smart playback strategy** opens a popup window for setting the playback speed of normal video separate from the playback speed of Smart search video. You can skip normal video during playback.

Do not		Videos
Do not Play Nor	1	
Normal Video		×8
Play Speed of S	-	×1
	OK	Cance

- Timeline: Marks on the timeline indicate video clips. Color of the marks is defined in the Legend. You can drag the timeline
 left or right to reposition it at the play head, and use the Timeline Width GUI to expand and contract time span of the line.
- Switch to sub-stream: Click this icon to switch between main stream video and sub-stream video.

Time panel - calendar



8.6.3 Normal Playback

Normal playback shows and plays back all video clips recorded from the selected camera on the selected day.

1. Open the Playback screen. Go to Menu | Playback.



- In the Playback screen, check the box for the camera channel(s) you want to playback. In the example shown above, the camera named ALI-NP3013RH (channel D1) was selected.
- 3. In the **Time** frame, the current day is identified. The recorder will search for available video in the selected month and mark each day that has recorded video available. In the screen below, the mark on the date shows video was recorded.



 Click the Play icon in play controls to watch the recording. Other marks will appear on the timeline if other video recordings are available.

8.6.4 Smart Playback

Smart playback is useful with continuous video recordings for quickly finding recorded video that has object motion, object line crossing or object intrusion in any part the video frame. You can select the kind of motion to find and mark it anywhere in the frame. The recorder will make search recorded video to show video clips that match your search criteria. This mode only allows single channel playback.

1. Open the Playback screen. Go to **Menu | Playback**.

				Playback		
Chann	el		~			
			2			
Max. 0	Cam. I	Ain. Ca	m			
3	IPdom	ŧ.				
211	IPCam	era 03				
1252	IPCam	era 04				
111	IPCam	era 06				
221	IPCam	era D6				
1	IPCam	era 07				
	IPCam	era 08				
Time						
<	2018 5	ep >				
S M	τw	TF	5			
			1			
2 3	4 5	6 7	8			
8 10	11 12	13 14	15			
23 24	25 26	27 2	3 29	Normal Smart Custom Tan Carses 10 2010 - 10 2010 - 10 2010		
30						
	ustorn t	earch		200 Hite Hite Hite Alle 2205 848 6256 6469 6469 은 Hi 상	2 88	

- 2. Check the select box for a camera in the left frame.
- 3. In the Time menu, click on a date when video was recorded.
- 4. Use the play controls in the **Playback** screen to start playing recorded video from the camera.
- 5. Click the Smart button.
- 6. Move the cursor into the video frame. Icons will appear at the bottom of the video window.



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- 7. Select one of the icons for Smart search: Line crossing, Intrusion detection or Motion detection.
- 8. Determine where in the video window you want to perform a Smart search, and then:
 - For Line crossing, click a point in the video window to set one end of the line, and then click a point to set the other end
 of the line.
 - For Intrusion detection, click a point in the video window to set one corner of a quadrilateral, and then click three
 other points in a circular fashion to set the other corners of the quadrilateral.
 - For Motion detection, drag a diagonal line across an area of the screen where you want to search for motion. A grid
 pattern will form.
- 9. After establishing the search pattern, the recorder will automatically search for video that matches your search criteria, and begin playing.
 - To use the same detection method in another area of the video, just reapply the pattern in a different area. The
 recorded will automatically re-search the video for motion in that area, and begin playing video.
 - To change to another search method, while video is playing, right click the mouse to stop video playback, and then
 reopen the smart search options toolbar. Click the Clear icon, and then click the icon for then new search you want to
 make. The recorded will automatically re-search the video for motion in that area, and begin playing video.
- 10. Right click anywhere to return to the **Menu** screen.

8.6.5 Custom Playback

Custom mode is used to search for video clips recorded as a result of a specific alarm or event. An example of using Custom Playback is shown below. Use this example as a model for other using Custom Playback. To use this feature:



1. Open the Playback screen. Go to Menu | Playback.

- 2. Check the select box for the camera in the left frame whose video you want to search.
- 3. Click the **Custom Search** button in the lower left corner.

			Play	back				u ،
Search Condition	Time	Custom		2018-10-18 00	0.00.00 10	2018-10-16 23.6	9.59 111	
	Tag			File Status	All	•		
	Event Type	None	•					
	Plate No.							
	Area/Country	None	1.4					
				A				
-	40			Empty Condition	s ć	learch	Save	
Exit								

In the Custom Search menu, open the Time drop down list and select the time span you want to search. You can also click
the calendar icons in the start and end time fields to select other time spans.

		F	Playback		V 🚓 🖛 G
earch Condition	Time Tag Event Type Piate No, Area/Country	Centratore Today Yesterday Last 2 Days Last 3 Days Last 7 Days Last 14 Days	2018-10-23 00.00.00 File Status All	2018-10-23 23 58	59
		Custom			

5. Open the Event Type drop down list, and then select the type of event you want to search for. In this example, **Intrusion** was selected.

Search start / end times

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		Play	back			ٹ 🕏	Ċ
Search Condition :	Time Tag Event Type Plate No. Area/Country	Play	back 2018-10-23 0 File Status	All	2018-10-23 23.68.59	¢ 4	ڻ ا
Ebit		Fast Moving Parking	nditior	ns d	Search Sav	/e	

6. You can also open the **File status** drop down list and search for only **locked** or **unlocked** files.

		Pla	yback			æ	ப
Search Condition	Time	Custom -	2018-10-23 0	00.00.00 EE	2018-10-23 23:58:59	證	
	Tag		File Status	A	-)		
	Event Type	Intrusion -		All			
	Plate No.			Unlocked	12		
	Area/Country	None -		Locked			
					1		

7. After selecting your search criteria, click the **Search** button at the bottom of the screen.

		PI	ayback			聋 🕹	Ċ
Search Condition	Time	Custom	- 2018-10-23	00.00.00	2018-10-23 23:69:5	9 🖄	
	Tag		File Status	All	•		
	Event Type	Intrusion	•				
	Plate No.						
	Area/Country	None	-				
			Empty Conditio	ons	Search	Save	
Exit							

Thumbnails of the search results will appear in the in the window. You can also click the tab at the top of the window to reset your search criteria.



Click to open menu, change Search criteria

8. Click the **Play** icon on the thumbnail of the video you want to watch. The Playback screen will open to play the video clip. Custom Search results are indicated by red marks on the timeline.



Export Custom Search result

You can export (backup) a Custom search result(s) from the results window. To export a video file from the Playback screen shown above:

1. Click the **Custom Search** button in the lower left corner.



Click on the thumbnail for the file you want to export. When selected, the thumbnail will be shaded, and a check mark will appear in the upper left corner.



- To export to a flash drive, insert a USB flash drive into an unused port on the recorder, and then click the Export button in the upper right corner.
- 4. In the Export popup menu, select the options you want to save, and then click OK.

Exp	port		×
	Video and log		
	Player		
	11		_
		KOK	Cancel

In the Export Path Settings window, click the Refresh icon, and then double click on the directory in the media where you
want to save the file. Open the Device N... drop down list to select another destination, if preferred.

Device N US	B Flash Disk 1-1		· · · ·	Ref
Name	Size Type	Edit Date	I De	
- I_Export	ted files Folder	10-16-2018 15:50	×	
- L.A.	Folder	10-12-2018 13:28	*	
a .s	Folder	01-10-2018 12:13	×	
T	Folder	02-22-2018 14:16	*	
T	Folder	01-10-2018 12:13	*	
a .fs	Folder	02-22-2018 14:13	*	
New Folder	🔄 Format	Free Space	5773.05MB	
Backu MP-	AVI 4			
		OK	Canant	

6. Select the **Backup** format (MP4 or AVI), and then click **OK** to export the file.

Device N	USB Flash	Disk 1-1		- 0
Name	Size	Type	Edit Date	I De
				-
+ ch	499.54	File	10-16-2018 15:50	*
- ch	2,5498	File	10-16-2018 15:50	×
= ch	9008.0	File	10-16-2018 15:24	~
- ch	4,287B	File	10-16-2018 15:24	*
ei ch	9009.0	File	10-16-2018 15:27	×
New Fold	er 🐼 Form	nat	Free Space	6773.05ME
Backu	MP4	AVI]	
			-	

Play Sub-periods

Use this feature to divide play long video files into 4 segments and play them concurrently in a 2×2 split window (four frames) within the video playback window. For instance, if you are playing a video file that is 2 hours long, the file will be divided into four 30 minute segments, and each segment will play concurrently in a one of the 4 frames.

1. Open the Playback screen. Go to Menu | Playback.



- 2. Check the select box for a camera in the left frame.
- 3. In the Time menu, click on a date when video was recorded.
- 4. Use the play controls in the **Playback** screen to start playing recorded video from the camera.



Sub-periods

5. Click the **Sub-Periods** icon.



Back icon (exit Sub-periods)

6. Click the **Back** icon (see above) to exit Sub-periods mode.

Thumbnails view

You can quickly open a thumbnails view of the video clips during Playback. This feature is valuable in quickly finding a video of interest. To use the thumbnails view:

1. Open the Playback window and play video from your camera.

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2. Hover your mouse cursor over a file mark on the timeline. Thumbnails will appear for video clips in the vicinity.



3. Click on the thumbnail of interest to play it in the playback window.

Tagging files

While watching a video file in Playback, you can click the **Tag** icon to associate it with a tag (label). Then, you can search for and retrieve the file later using its Tag.



1. Open the Playback screen to play video recorded from a camera, and then find a section of video you want to Tag.

- 2. Move the mouse cursor into the video window to open the popup toolbar. Click the **Tag** icon (see above).
- 3. In the Add Tag popup window, enter a name for the Tag you want to use.



4. Click **OK** to close the window.

Add Tag		
Tag Na	Crane	
	OK	Cancel

5. After tagging, the mark on the timeline shows a white dot, and the Tag name appears in the thumbnail.



Thumbnail show Tag name

White mark on timeline shows it is Tagged

Custom search for tag

You can perform a custom search and find the file with the Tag you assigned. To perform the search:

1. Open the Playback screen. Go to **Menu | Playback**.

							Playback		
CI	hann	el							
\leq					9				
м	ax. C	am		din : C	Carr	i.i.			
	2								
	5	IP(dome	ź.					
1		IP	Cam	era (03				
12		IP	Cam	era C	14				
12		IP	Cam	era C	36	~			
		IP	Cam	era C	36				
		iPi	Cam	era C	70				
		P	Cam	era C	80				
Te	me								
		.20	18 5	iep					
s	м	т	W	т	F	5			
						1			
2	3	4	5	6	7	8			
8	10	11	12	13	14	15			
23	24	25	26	27	28	29	Normal Smurt Custom Tag Comerce 19 000000 1 Day		
30									
	¢	ust	orn S	earc	:h		2109 1409 1609 19209 2020 22209 949 19209 1920 1920 1920 금 Hi 26		

- 2. Check the select box for a camera that produced video that was tagged.
- 3. Click the **CustomSearch** button in the lower right corner, and then enter the Tag name you are searching for in the Tag field.

							Ρ	lay	ba	ck					ധ
Search Condition	Time	c	usto	m				•	20	018-	0-23	00.00.00 111	2018-10-23 23 59 59	107	
	Tag	C	rane					\odot	File	e Sta	tus	All			
	Event Type	nt Type 1 2	2	3	4	5	6	7	8	8 9 0					
	Plate No.	q	w	e	r	t	У	u	1	0	P				
	Area/Country	3	a	s	d	1 1	9	h	1 1	ĸ	Ē.				
		0	z	×	c	۷	b	n	m	<	×				
		123	1. 0	D	1		13		D	<	r I				

4. In the date fields, enter the date range spanning when the tag was created.

			Play	/back	1	/ 👌 🕹	Ċ
Search Condition	Time	Custom		2018-10-17 0	0.00.00 12	2018-10-17 23:58:58 📖	
	Tag	Crane		File Status	All		
	Event Type	None					
	Plate No.						
	Area/Country	None					

5. Click the **Search** button at the bottom of the window. The search result will appear in the screen.

Enter date range when Tag was created

8	Playback	⊈ ≗ ୯)
Search Condition	Group: Chaunel Time • 1 file(s) total.	All Video Picture BB Export Select All
	 ▼ D1 10-17-2018 13.48:27 ~ 10-17-2018 13.48:37 ■ D1 10-17-2018 13 	1 file(s).

6. Click the **Play** icon in the result thumbnail to play the file in the Playback screen.

External file

You can play an external file that was saved to some attached device such as a USB flash drive. To play a video file on a USB flash drive:

1. Open the Playback screen. Go to **Menu | Playback**.

E	3		Playback	¢		ധ
Chann	el C	0				
Max. C	Cam. Min. Can	n				
	ALI-NP301					
3	IPdome					
111	IPCamera 03					
122	IPCamera 04					
1111	IPCamera 05					
	IPCamera 06					
	IPCamera 07					
	IPCamera 08					
Time						
	2018 Sep >					
SM	TWTF	5				
2 3	4 5 8 7	8				
9 10	11 12 13 14	15				
16 17	18 19 20 21	22				
23 24	25 26 27 28	29	Normal Smart Custom Tag C 2018-06-16 2010-00 1 Day			
30			2/00 14/00 10/00 10/00 20/00 22/00 0-10 02/00 04/00 00/00	00'00 '	10'00'	i i i i i i
0	ustom Search			ent 🔳	3 26	0 53

External File

- 2. Insert a USB flash drive with the file you want to play into an unused USB port on the recorder.
- 3. Click the External File icon.

		Playback	¢	Ċ
Device USB F File T USB F	<u>ash ()</u> ash Disk 1-1			
File	Play			
= 1_Capt				
a .Tempo	• 1			
= Trashes				
 fseven 180508 				
- 180508	P			

- 4. Open the **Device** drop down list and select the USB drive containing the file. See above.
- 5. Open the **File Type** drop down list, and select the format of the file you want to play.



6. Double click on the directory on the Device where the file is located, and the click the **Play** icon associated with the file.



Back icon (exit Sub-periods)

7. Use the playback controls as needed, and click the **Back** icon to return to the Normal playback window.

8.7 File Management - search and export

You can use the File Management menus to search for and export files recorded or captured from your cameras.

8.7.1 File Management - All Files

The example shown here can be applied to most search and export needs.

In the procedure below, the camera on channel D1 (ALI-NP3013RH) was previously configured to detect Line Crossing events. Video from these events between 10/22/18 and 10/25/18 was found using the **File Management - All Files** menu. A video resulting from the search was selected and exported to a USB flash drive for backup. To perform this procedure:

1. Open the File Management menu. Go to Menu | File Management | All Files.

		F	ile Man	agement			2 ±	Ċ
Pre All Care	Time	Custom		2018-10-24 0	10.00.00 ET	2018-10-24 23:58:58 🟥		
Lo	Camera	(All) Camera						
📰 Human Files	Tag			File Status	All			
Vehicle Files	Event Type	None						
	Plate No.				4			
Control Constitute	Area/Country	None						
				Empty Condition	ns	Search Save	8	

- 2. Select the time span across which you want to search. The menu provides two methods:
 - a. Open the **Time** option drop down list, and select the period back from the current day to search.

		æ	ധ				
All Files	Time Camera	Today	2018-10-24 0	2018-10-24 23:58:59	122		
Human Files	Tag Event Type Plate No.	Yesterday Last 2 Days Last 3 Days	File Status	All			
Search Condition		Last 7 Days Last 14 Days Custom					

b. Or, use the Custom (calendar) feature to select the start date and time. Click the calendar icon shown below to open the calendar menu, click on the date for start (or end), and then set the time in GUI at the bottom. Click **OK** to select your settings.

	File Management							ن بے فی ا			
Co All Files	Time	Time Custom -				2018-10-24 00:00:00					2018-10-24 23.68.58 📾
🗐 Human Files	Camera Tag	(All) Camera		s	M	20 T	W	T	F	5	
Vehicle Files	Event Type	None		7	8	9	10	11	12	13	
Search Condition	Plate No. Area/Country	None	12	21	22 29	23	24	25	26	27	
				00	: 0	0 :	00	-	0	< L	

Enter date range start and end time

- c. Repeat the sub-step above to set the end date and time. Not that time time setup in these menus is 10/22/18 to 10/25/18
- 3. Open the Camera drop down list and select the camera(s) you want to use in the search. In the menu below, only camera channel D1 was selected.

	File Management							
AR Files	Time Camera	Custom -	2018-10-24 00.00.00	2018-10-24 23:59:59 🖾				
😨 l Human Files	Tag Event Type Plate No.	[Al] Camera [D1] ALLNP3013RH [D2] IPdome	λ.	15				
Search Condition	Areacountry	[D3] Camera 01 [D4] ALI-NS4025R [D5] IPCamera 05 [D6] IPCamera 06						

- 4. In this example, skip the Tag option since we are not searching for a tagged file.
- 5. Next, open the Event Type drop down list and select **Line Crossing** the event we are looking for.

		File Ma	anageme	nt		æ 🕹	ധ
All Files	Time Camera les Tag Event Type Plate No.	Custom - (D1) ALI-NP3013RH Rone All	2018-10-	24 00 00 00 15 - - All	2018-10-24 23 58 59	2	
Search Condition	Alarm Input Motion Face (Face Capture) Vehicle						
		Intrusion Region Entrance Region Exiting Lottering Gathering Fast Moving	n	Jibons 5	Search Si	sve	

 Notice that the File Status for the search will look at all files. If the file was locked or unlocked, should select that option. For this examle, we'll select All.

	File Management								Ċ	
All Files	Time Camera	Custom - 2018-10-24 00.00.00 🖾 2018-10-24 23:58:59 [D1] ALL-NP3013RH -								
Human Files	Tag Event Type Plate No.	Line Crossing +		File Status	- X					
Search Condition	Area/Country	None	*		Lo	Locked				

7. Click the Search button at the bottom of the screen. Search results are shown in thumbnails.



Click on the thumbnail for the file you are searching for to select it (see above). When the file is selected, a check mark appears
in the upper left corner of the thumbnail, and the thumbnail is shadowed. To watch the video of the file, click the Play icon in
the thumbnail.



9. To export the file that is selected (checked) and write it to a USB flash drive, Insert a flash drive into an unused port on the recorder, and then click the Export button.


10. In the **Export** popup window, select the options you want to export. Select **Player** to export a video player with the video file and log.



- 11. In the Export **Path Settings** window:
 - Click the Refresh icon to update the Device list. Open the Device N... drop down list to select another destination, if
 preferred.
 - b. Double click on the directory in the media where you want to save the file. The directory will open. You can hover the mouse cursor over the directory entry to show the full name.

Path Settings				\times	
Device N	USB Flash [Disk 1-1		• C-	- Refres
Name	Size	Туре	Edit Date	I De	
- L	Capturer	Folder	05-17-2018 16:48	×	
- IC	Cuptures	Folder	08-19-2018 13:28.		
a 1		Folder	10-13-2017 09:02	×	
- 1		Folder	06-12-2017 16:15	×	
= 18		Folder	01-02-2018 22:14	*	
= 18		Folder	09-06-2018 17:07	~	
New Folde	er 🖻 Forma	st	Free Space	3477.16MB	
Backu,	MP4	AVI	1	Contractor of the States	
			OK	Cancel	

c. Click AVI to change the video file format to AVI.

Device N	USB Flash	Disk 1-1	12	**	· 3
Name	Size I	Type I	Edit Date		Del
New Fold	er 🗟 Form	nat	Free	Space	3477.16ME

- d. Click **OK** to export the file(s). The Path Settings window will close.
- 12. Remove the USB flash drive from the recorder.
- 13. Plug the USB drive into a computer, and open the directory where the file was saved. The video file is highlighted in the folder shown below.

rganize 🕶 🛕 Play 🖛 Burn New folder				1日 •	
TOSHIBA (I:)	*	Name	Date modified	Туре	Size
1 Photos		🛓 ch01_20181024075730.mp4	10/24/2018 9:31 AM	VLC media file (.m	6,644 K
LABC photos		ch01_20181024075730.64	10/24/2018 9:31 AM	Text Document	4 K
👃 ICaptures					
_Screen rulers					
1_security	+	•	#		

14. Play the file to ensure it is what you need. VLC Media Player was use to play this file (see below).



8.7.2 File Management - Human Files

Use the File Management Human Files menu to search for human pictures and videos. Search and export methods for these types of pictures are very similar to those for **File Management - All Files**. See "8.7.1 File Management - All Files" on page 132 for more information. The camera you use must support this feature. The **File Management - Human Files** menu is shown below.

		Fi	le Man	agement		🚑 🖄	Ċ
Des an Casa	Time	Custom		2018-10-24 00:00:00	2018-10-24 23 59 5	59 世	
Lo Arries	Camera	(All) Camera					
🗐 Human Files							
💭 Vehicle Files							
Search Condition							
				Forth Conditions	Salish	-	

8.7.3 File Management - Vehicle Files

Use the File Management Vehicle Files menu to search for vehicles and licence plates. Search and export methods for these types of pictures are very similar to those for **File Management - All Files**. See "8.7.1 File Management - All Files" on page 132 for more information. The camera you use must support this feature. The **File Management - Vehicle Files** menu is shown below.

		File	e Man	agement		æ	Ċ
All Files	Time Camera Plate No.	Custom (All) Camera	•	2018-10-24 00:00:00 15	2018-10-24 23:58:59		
Search Condition	Ares/Country	None					
		Backup Licen		Empty Conditions	Search	Save	

SECTION 9 Managing User Accounts

User accounts are created to control access to the system both at the NVR and when logging into the NVR from a remote computer. Each account has a User Name, Password, and a selection of permissions granted to the user.

By default, one user, named *admin*, is provided. The *admin* user is granted all permissions with the system, and can create, modify, and delete other users.

The NVR supports up to 32 user accounts.

9.1 Adding a user account

- 1. Log into the NVR as an administrator.
- 2. In the Menu display, click the Configuration icon, and then click User in the left frame. Initially, the user name list appears as that shown below.

3					Configu	iration		
-	General		+ Add	🕑 Modily	× Delete 🧕 🧐) Live Vie		
107	Cremeran		No	User Name	Security.	Priority	User's MAC Address	Permission
മ			1	admin	Strong Pas.	Admin	00 00 00 00 00 00	÷
۲	Network	э.						
a	Live View	. P.)						
Ŷ	R5-232							
	POS							
62	System Service	2						

- 3. Click Add to open the Add User menu.
- 4. In the **Confirm Permission** popup window, enter your administrator user password, and then click **Next**.

Confirm Perr	nission		×
Contern			
	Next	Cancel	

- In the Add User menu, enter the information for new user, including User Name, Password, Password and Confirm password, Level and User's MAC Address (optional). Ensure that the menu shows that the password you selected is a "Strong" password.
- 6. Click **OK** to continue.

6	General		+ A	ki 🕑 Modiły	×	Delet	e	۲	Live	vie.								
B	User		No	Add User	1.5	Secu	K BV			En lo	nty.		1.0	User	× MAC	Addre:	Pierro -	ssion
0	Network:	3	1111	User Name	Jo													
a	Live View	P.		Password	***	•••••	•											
Q	R5-232				-			-	-	Stre	ang			_				
	POS			Confirm	1	2	3	4	5	6	7	8	9	0				
61	System Service	20		User Level	9	w	0	r	t f g	y	u	1	0	P				
				User's MAC Ad.	0	z	×	c	v	b	n	m	<	3				
					122/		ų.,	-			D	D	0	H				
													1	Ø	£			
			25													10		

- 7. Set the user Level to Operator or Guest. Different Levels have different operating permission.
 - Operator: The Operator user level has permission of Two-way Audio in Remote Configuration and all operating
 permission in Camera Configuration by default.
 - Guest: The Guest user has no permission of Two-way Audio in Remote Configuration and only has the local / remote playback in the Camera Configuration by default.
- 8. User's MAC Address: The MAC address of the remote PC which logs onto the NVR. If this option is configured and enabled, a remote user with this MAC address only can access the NVR.
- 9. Click the **OK** to save the settings and close the **Add User** menu. The added new user will be displayed on the list. See the screen shown below.

- 3					Configuration		
-	General		+ Add	🕑 Modiły	× Delete 🛞 Live Vie		
-027	Cremeran	_	No.	User Name	Security Priority	User's MAC Address	Permission
ß			1				
٢	Network	3	2	Joe	Strong Pas. Ouest	00.00.00.00.00.00	0
2	Live View	$\left P_{i} \right $					
Ŷ	R5-232						
	POS						
9	System Service	2					

 Click the Permission icon for the user you created (user Joe). The Permission lists initially show the default permissions for the user level you selected during the User Add.

		Configuration	
۲	Oeneral	Permission :	Permission
ക	Unir		
٢	Network	Local Log Search Local Parameters Settings	8
a	Live View	Local Camera Management	
\odot	R5-232	Local Advanced Operation	
	POS		
61	System Service		
		Apply Circ Cancel	í.
		¥.	

11. Check the select boxes for the additional permissions you want to assign.

Local Configuration options:

- Local Log Search: Searching and viewing logs and system information of NVR.
- Local Parameters Settings: Configuring parameters, restoring factory default parameters and importing / exporting configuration files.
- Local Camera Management: Use for adding, deleting and editing of IP cameras.
- Local Advanced Operation: Operating HDD management (initializing HDD, setting HDD property), upgrading system firmware, clearing I / 0 alarm output.
- Local Shutdown Reboot: Shutting down or rebooting the NVR.
- 12. Click **Apply** and then click the **Remote Configuration** tab.

Remote Configuration options

Permission				2
Local Configuration	Remote Cosfiguration	Camera Config	uration	
< Remote Log Seam	ch			
Remote Paramete	rs Settings			
Remote Camera I	tanagement			
Remote Serial Por	t Control			
Remote Video Out	tput Control			
Two-way Audio				
Remote Alarm Co	ntrol			
Remote Advanced	Operation			
Remote Shutdown	/ Reboot			
	App	wy late	CIC	Cancel

- 13. Check the select boxes for the additional permissions you want to assign.
 - Remote Log Search: Remotely viewing logs that are saved on the NVR.

SECTION 9: MANAGING USER ACCOUNTS

- Remote Parameters Settings: Remotely configuring parameters, restoring factory default parameters and importing / exporting configuration files.
- Remote Camera Management: Remote adding, deleting and editing of the IP cameras.
- Remote Serial Port Control: Reserved for future expansion.
- Remote Video Output Control: Sending remote button control signal.
- Two-Way Audio: Enable two-way audio between the remote client and the NVR.
- Remote Alarm Control: Remotely arming (notify alarm and exception message to the remote client) and controlling the alarm output.
- Remote Advanced Operation: Remotely operating HDD management (initializing HDD, setting HDD property), upgrading system firmware, clearing I / 0 alarm output.
- Remote Shutdown / Reboot: Remotely shutting down or rebooting the NVR.
- 14. Click Apply and then click the Camera Configuration tab.

Camera Permis	Locald Margarit Operation		
Camera	Remote Live View		Select All
D1 D7 D13	Remote Manual Operation Local Playback Remote Playback Local PTZ Control Remote PTZ Control Local Vide Export	D6 D11	D6 D12
	Local Live View		

15. In the Camera Configuration tab, open the Camera Permis... drop down list, select the permission you want to allow, and then check the select boxes for the camera you want to grant the permission for.

Camera Configuration

- Remote Live View: Remotely viewing live video of the selected camera(s).
- Local Manual Operation: Locally starting / stopping manual recording, picture capturing and alarm output of the selected camera(s).
- Remote Manual Operation: Remotely starting / stopping manual recording, picture capturing and alarm output of the selected camera(s).
- Local Playback: Locally playing back recorded files of the selected camera(s).
- Remote Playback: Remotely playing back recorded files of the selected camera(s).
- Local PTZ Control: Locally controlling PTZ movement of the selected camera(s).
- Remote PTZ Control: Remotely controlling PTZ movement of the selected camera(s).
- Local Video Export: Locally exporting recorded files of the selected camera(s).
- 16. Click **Apply** to save your settings for the permission you selected, and the repeat the above step for other permissions, as needed.
- 17. Click **OK** to save your settings and exit the **Permission** menus.

9.2 Live View Permissions on Lock screen

You can control which camera channels can be viewed when the Live View screen is locked. By default, all users can see all channels. To change this configuration:

- In the Menu display, click the **Configuration** icon, and then click **User** in the left frame. You can delete any user account except the *admin* user.
- 2. Click the Live View Permission on Lock Screen link at the top of the screen.

				Cont	figuration				
6	Oeneral	+ Add	Modify	× Delete	🛞 Live Vie				
R	Uner	Local Live View		1 50000	t Date	10 1	The series MARY Address of	Perm	ission
۲	Network	Camera					Select A8 >	8	
a	Live View	- D1 - D7	- D2	- D3	- D4 - D10	- D5 - D11	- D6 - D12		
\odot	R5-232	- D13	014	O15	- D18				
8	POS System Service	All the use	rs will have the	ive view perm	nission of selecte	d channels			
					Apply	QK 1	Cancel		

- 3. In the Camera box, check or uncheck the channels you want to grant or restrict, and then click Apply.
- 4. When the normal user (Operator or Guest) has no local live view permission for specific camera (s) (refer to 17.2.2 Set Local Live View Permission for Non-Admin Users), the live view permission for such camera (s) on lock screen status cannot be configured (live view not allowed by default).

NOTE When the an Operator or Guest user has no local live view permission for specific camera (s), the live view permission for those camera(s) on the lock screen (previous user logged out) cannot be configured (live view not allowed by default).

6. Click Yes in the popup window, then click OK in the Local Live View window to use the changes and continue.

9.3 Deleting a user account

- 1. In the Menu display, click the **Configuration** icon, and then click **User** in the left frame. You can delete any user account except the *admin* user.
- 2. Click the entry for the user to be deleted from the list. When the item is selected, it is highlighted.

					Configura	ition			
-	Viennet		+ Add						
100	Cremeran		No:	User Name	Security	Priority	User's MAC Address	Permiss	sion
			1	admin	Strong Pas	Admin	00 00 00 00 00 00		
۲	Network	э.	2	,Joe	Strong Pas	Operator	00.00.00.00.00.00	8	
a	Live View	20							
P	R5-232								
	POS								
-	System Service	b.,							

- 3. Click the **Delete** icon to delete the selected user.
- 4. Click **Yes** on the confirmation popup window.

9.4 Editing a user account

- 1. In the Menu display, click the **Configuration** icon, and then click **User** in the left frame. You can delete any user account except the *admin* user.
- 2. Click the entry for the user to be edited. When the item is selected, it is highlighted.

					Configura	ation			
	and and		+ Add						
tor is	Control on		No.	User Name	Security	Priority	User's MAC Address	1	Permission
23			1	admin	Strong Pas	Admin	00.00.00.00.00		-
•	Network	э.	2	Joe	Strong Pas.	Operator	00.00.00.00.00.00		8
a	uve View	20							
9	95-232								
	POS								
Q 1	System Service	Þ.							

3. Click Modify.

6 0	heneral	+ -	Add 🛛 Modify	× Delete () Live Vie			
0		No	Edit User		×	Address	Permissio
	letwork Ive View R5-232	2 2	User Name Password User Level User's MAC Ad.	Joe 	Modify	10,00	5 X
20 P	lystem Service	80					

- 4. In the User Level drop-down list, select either Operator and Guest. You can edit the user information, including user name, password, permission level and MAC address. To change the password, click Modify to the right of the Password field, then enter the new password in the Password and Confirm fields.
- 5. Click **OK** to save the settings and exit the menu.
- Click the **Permission** icon on the user line to change the specific permissions for the User Level you granted. See "9.1 Adding a user account" on page 141 for more information.

9.4.1 Modify admin user

You can change the *admin* user password and other security settings. You must log into the NVR as an admin user to change admin settings.

- 1. In the Menu display, click the **Configuration** icon, and then click **User** in the left frame.
- 2. Click the entry for the admin user to be edited. When the item is selected, it is highlighted.

3					Configura			
	(Decourt)		+ Add	C Modify 3	C Delete 🛞 🛛	ve Vie		
(9)	Cremeran	perser at		User Name	Security.	Priority	User's MAC Address	Permission
B			1					
۲	Nebwork		2	Joe	Strong Pas	Operator	00.00.00.00.00.00	0
a	Live View	P.)						
\odot	R5-232							
	POS							
Ŕ	System Service	30						

3. Click Modify.

					Configuration					
8 9 9 9 9 8 9 8 8 8 9 8 8 8 8 8 8 8 8 8	Ceneral Over Network Live View RS-232 POS Bystem Service	3 3 3	+ Add	Edd User User Name Password User's MAC Ad. Unlock Patt. GUID File Security Qu	Configuration Co	0 : 0¢ © Ø	X	Md3ress. 20.00 00.00	بطر بال الم	
						ĊĬC.	Cancel			

- 4. In the admin Edit User menu, change the settings as needed. See "2.1 System activation" on page 6 for more information.
- 5. Click **OK** to close the menu and continue.

SECTION 10 Network Settings

10.1 Configuring General Network Settings

Network settings must be properly configured before you connect the NVR to cameras on the network, or access it remotely. In many cases, the IP address of your recorder should be fixed (unchanging) for easier remote access over time. Consult your network administrator to ensure you setup your recorder with compatible network settings.

If your network includes a DHCP server, you can enable DHCP in the TCP/IP menu to automatically acquire compatible network settings for your recorder from DHCP. DHCP is enabled by default. However, settings from DHCP can change over time (i.e. they are dynamic). To prevent the settings acquired from DHCP from changing (making them "fixed"), simply disable the DHCP option in the menu after acquiring DHCP network settings.

1. Open the Network Settings menu. Go to Menu | Configuration | Network | TCP/IP.

						Conf	iguratio			
۲	General		TCP/IP DONS	NTP	N	ĸт				
ß	User		NIC Type Enable DHCP	1000	100M/	1000M 8	Self-a -	Enable Obtain	8	
۲	Network	Pri Ad	IPvi Address	192 188 3 87 Preferred DHIS 192.186	192.100.3.1					
	TOPMP		IPv4 Subnet	266	255	265	129	Atemate DNS		
	Advanced		IPvA Default	192	100	3	14			
			MAC Address	58:03 n	2c a:	2:38				
a	Live View	×	MTU(Bytes)	1500						
0	RS-232		Internal NIC	192	168	264	1.8			
	POS									
- 62	System Service	>:								
			Apply							
_										

- In the TCP/IP menu, select or enter the following parameters: NIC Type, IPv4 Address, IPv4 Gateway, MTU (valid range is value range of MTU is 500 ~ 9676) and DNS Server IP addresses. If the DHCP server is available, check the Enable DHCP box to automatically obtain an IP address and other network settings from the network DNS server.
- 3. Check the Enable Obtain select box to obtain the DNS Server Address address automatically.
- 4. Enter the Internal NIC IPV4 Address, if necessary, to assign IP addresses to the cameras connected to the PoE interfaces.
- 5. Click Apply to save your settings.
- 6. If you used DHCP to acquire network settings, you can retain those settings by un-checking the **Enable DHCP** box, and then clicking **Apply**. See below.

6	General		TCP/P DONS	I NT	P 14	eT.				
2	User		NIC Type	104	V100M	1000M S	ielf-a -			
m	Network		Enable DHCP					Enable Obtam	-	
	701040		IPvi Address	192	265	255	128	Atemate DNS	192.160.3.1	
-	Constant of the		IPv4 Default	192	160		1			
	Advanced		MAC Address	58:03	R: 2c a2	1.38				
a	Live View	10	MTU(Bytes)	150	0					
Q	R6-232		Internal NFC	192	168	264	. 1			
8	POS									
(R)	System Service	>:								

10.2 Configuring Advanced Settings

10.2.1 Platform Access setup

Alibi Connect access platform can be used for Alibi Witness 2.0 smartphone app access by creating a direct peer-to-peer connection. It can also be used to download recorder firmware updates and enables the DDNS platform.

			Configuration	
0	General		Email Platform Access More Settings	
ß	User		Access Type Alibi Connect +	
۲	Network	~	Enable Server Addr. vww.albiconnect.com III Custarn	
	тсрир		Englée Stream	
	Advanced .		Verification Cod	
a	Live View	×	Scan the QR code via the Alta Wilness 2.0 app to add the device.	
Q	R5-232			
	POS			
0	System Service	>:		
			Aptiv	

- 1. To use the Alibi Connect access platform, check the Enable box, and then click **Apply**. A Terms of Service window will open.
- 2. In the Terms of Service window shown below:

SECTION 10: NETWORK SETTINGS



- a. Scan the QR code to open the **Terms of Service** for using this feature. Read the agreement thoroughly.
- b. If you agree with the ToS, check the box in the middle paragraph to acknowledge it.
- c. In the Verification Code field, enter a unique identifier for your system, and then click OK to return to the Performance Access menu. The Verification Code should contain 6 to 12 characters with letters (a to z, A to Z) and numbers (0...9) and is case sensitive. The code OBSdevice was entered here.



 In the screen below, check the Enable Screen Encryption box to use this feature, if you prefer to do so, and then click Apply to continue.

			Configuration	4 2 0
0	General		Email Platform Access More Settings	
ß	User		Access Type Albi Connect -	
db	Network		Enable -	
2	TODAD		Easter Stream	
-	(Grap	-	Verification Cod OBSdevice	
-	Advanced.	-	Status Offine	
a	Live View	10	Scan the QR code via the Aliti Witness 2.0 app to add the device.	
Q	R5-232			
	POS			
	System Service			
			Apply	

4. Click Apply to save your settings.

10.2.2 Configuring DDNS

If your NVR is set to use PPPoE as its default network (Internet) connection, you may set Dynamic DNS (DDNS) to be used for network access. **DynDNS** and **NO-IP** are supported. Registration with your ISP is required before configuring the system to use DDNS.

- 1. Open the Network Settings menu. Go to Menu | Configuration | Network | TCP/IP.
- 2. Click the **DDNS** tab to open the DDNS Settings menu.

			Config		
۲	Oeneral	TCP/IP DD	NTP NAT		
2	User Nebwork	 DDN5 Type	Dwonel		
	TOPMP	Device Do	NO-IP	Password	
~	Advanced	Status	DONS is disabled.		
0	R5-232	Ap	eko,		

- 3. Check the Enable DDNS box to enable this feature.
- 4. Open the DDNS Type drop down list and select either DynDNS or NO-IP.
 - DynDNS:

			Configuration	
0	General		TCP/IP DONS NTP NAT	
ß	User		Enable 9	
۲	Network	~~	Server Addr User Name I I	
			Device Do	
	Advanced		Status DONS is disabled.	
a	Live View		Apple	
9	RS-232			

- i. Enter Server Address for DynDNS (i.e. members.dyndns.org).
- ii. In the NVR Domain Name text field, enter the domain obtained from the DynDNS website.
- iii. Enter the User Name and Password registered in the DynDNS website.
- NO-IP: Enter the account information in the corresponding fields.
 - i. In a browser window, go to the URL: http://alibiddns.com

- ii. In this website, create a **Domain Name**, **User Name** and **Password** for the recorder. Record these for use later.
- iii. In the recorder DDNS menu, open the **DDNS Type** drop-down list and select NO-IP.

1997			Configuration	
6	General		TCP/IP DONS NTP NAT	
ß	User		Enable D	
•	Network	~~	Server Addr dynupdate no-ip.com User Name	
	TOPHP		Device Do Password	
	Advanced		Status DDNS is disabled.	
a,	Live View	- >	Apply	
0	R6-232			

- iv. Enter Server Address for NO-IP (dynupdate.no-ip.com).
- v. In the Device Domain Name, User Name and Password fields, enter the information setup at the alibiddns.com website. For example:
- vi. Click Apply to save your settings.

10.2.3 Configuring NTP Server

A Network Time Protocol (NTP) Server can be configured on your NVR to ensure the accuracy of system date / time.

- 1. Open the Network Settings menu. Go to Menu | Configuration | Network | TCP/IP.
- 2. Click the NTP tab to open the NTP Settings menu.

	Configuration	
 General Quer Network TCPN# 	TCPAP DOHS NTP HAT Enable	
Advanced	Audar	

- 3. Check the Enable NTP box to enable this feature.
- 4. Select the following NTP settings:
 - Interval: Interval in minutes between the two synchronizing actions with an NTP server.
 NOTE: The synchronization time interval can be set from 1 to 10080 minutes. The default value is 60 min. If the NVR is connected to a public network, use an NTP server that has a time synchronization function, such as the server at the National Time Center (IP Address: 210.72.145.44). If the NVR is setup in a customized network, NTP software can be used to establish a NTP server used for time synchronization.

- NTP Server: IP address of NTP server
- NTP Port: Port of NTP server
- 5. Click **Apply** to save your settings and close the menu.

10.2.4 Configuring Remote Alarm Host

With a remote alarm host, Alibi CMS, configured, the NVR will send the alarm event or exception messages to the host when an alarm is triggered. This feature is configured on the Menu | Configuration | Network | Advanced | More Settings menu.

			Configuration	
•	General	Email Platform	n Access More Settings	
۵	User	Alarm Host IP Alarm Host	0	
۲	Network	Server Port	8000	
	TCPAP	HTTP Port	80	· · · ·
	Advanced	Mullcast IP RTSP Port	1050	
a,	Live View			
\odot	R5-232	Aprol	_	
	POS			
-	System Service			

- 1. In the menu shown above, configure the following appropriately:
 - Alarm Host IP/Port: Set the IP address and port number of the PC with the Alibi CMS (ACMS) client software. Port is
 the port number configured in ACMS used to receive alarm event and exception messages.
 - Server Port: Server port (8000 by default) configured for remote client software access. The valid range is 2000 to 65535.
 - HTTP Port: HTTP port (80, default) is configured for remote web browser access.
 - Multicast IP: Multicast can be configured to enable Live View for cameras that exceed the maximum number allowed through the network. Using the multicast function, more than 64 cameras are connectable. A multicast IP address covers Class-D IP ranging from 224.0.0.0 to 239.255.255.255 and it is recommended to use an IP address ranging from 239.252.0.0 to 239.255.255.255. When adding a device to the ACMS, the multicast address must be the same as that of the device.
 - RTSP Port: RTSP (Real Time Streaming Protocol) is a network control protocol designed to control streaming media servers. The port is 554 by default.

NOTE The multicast function must be supported by the network switch to which the NVR is connected.

2. Click **Apply** to save your settings and close the menu.

10.2.5 Configuring Email

The system can be configured to send an Email notification to up to three designated users if an alarm event is detected, an alarm or motion event is detected or the administrator password is changed.

Before configuring the Email settings, the NVR must be connected to a local area network (LAN) that maintains an SMTP mail server. The network must also be connected to either an intranet or the Internet depending on the location of the e-mail accounts to which you want to send notification.

- 1. Open the Network Settings menu. Go to Menu | Configuration | Network | TCP/IP.
- 2. Set the IPv4 Address, IPv4 Subnet Mask, IPv4 Gateway and the Preferred DNS Server in the Network Settings menu.

						Conf	iguratio			
6	Oeneral		TCP/IP DONS	NTF	N	AT				
ß	User		NIC Type Enable DHCP	10M	/100M/	1000M 8	ielf-a -	Enable Ottan		
۲	Network	~	IPv4 Address	192	100	. 3	87	Preferred DNS	192 160 3 1	
	TOPHP		IPv4 Subnet	255	255	255	128	Alternate DNS		
-	Advanced		IPv4 Default	192	168	. 3	.1			
			MAC Address	58:031	b 2c al	2 38				
a	Live View	×	MTU(Bytes)	150)					
9	R5-232		Internal NIC	192	168	264	. 1			
	POS									
-	System Service	>:								
					-					
			Apply							

- 3. Click **Apply** to save your settings and close the menu.
- 4. Click the **Email** tab to open the email settings men.

Oeneral	Email Pla	form Access Mo	re Settings			
C User	Enable Serv	8. X.		SMTP Server		
Network	Password			SMTP Port	26	
тсрир	Sender			Enable SSL		
Advanced	Select Rece	Receiver	•			
2 Live View	Receiver					
RS-232	Receiver's					
DI POS	Interval	21				
System Service	>	st	Apply			

- 5. Configure the following Email settings:
 - Enable Server Authentication (optional): Check the checkbox to enable the server authentication feature.
 - User Name: The user account of sender's Email for SMTP server authentication.
 - Password: The password of sender's Email for SMTP server authentication.
 - SMTP Server: The SMTP Server IP address or host name (e.g., smtp.263xmail.com).
 - SMTP Port No.: The SMTP port. The default TCP / IP port used for SMTP is 25.
 - Enable SSL / TLS (optional): Click the checkbox to enable SSL / TLS if required by the SMTP server.
 - **Sender**: The name of sender.
 - Sender's Address: The Email address of sender.
 - Select Receivers: Select the receiver. Up to 3 receivers can be configured.
 - Receiver: The name of user to be notified.
 - Receiver's Address: The Email address of user to be notified.
 - Enable Attached Pictures: Check the Enable Attached Picture box if you want to send email with attached alarm
 images. The interval is the time of two adjacent alarm images. You can also set SMTP port and enable SSL / TLS here.
 - Interval: The interval refers to the time between two actions of sending attached pictures.
 - Test: Click this button to send a test message to verify that the SMTP server can be reached.
- 6. Click **Apply** to save your settings. A configuration using a Gmail email account may look like the following.

Oener	et :	Email Platform	Access More Settings		
D. User	rk 🗸	Enable Serv. User Name	HVR3004H@gmail.com	SMTP Server	smtp@gmail.com
TCPM	p cet	Sender Sender's Ad.	Kevin KevinStr@observint.com	Enable SSL	2
2 Live V	iew >	Select Rece.	Receiver 1 - Kevin		
⊘ R5-23]] POS	2	Enable Atta	2s +		
Syster	m Service 🗦	Test	Apply		

7. Click the Test button to test your Email settings. The corresponding Note message box will pop up.



10.2.6 Configuring UPnP[™]

The Universal Plug and Play (UPnP^M) feature allows the device to seamlessly discover other network devices and establish functional network services for data sharing, communications, etc. You can use the UPnP function to enable the fast connection of the device to the WAN via a router without port mapping.

If you want to enable the UPnP function of the device, you must enable the UPnP function of the router to which your device is connected. When the network working mode of the device is set as multi-address, the Default Route of the device should be in the same network segment as that of the LAN IP address of the router.

0	General		TCP/IP DONS	NTP NAT				
ß	User		Enable Mapping Type	Manual				
1	Network	~	Port Type	1 Edt 1	External Port	External IP Address	Port	UPy# Status
			HTTP Port					
_	TEPME	_	RTSP Port		1050	00.00	1050	Inactive
	Advanced		Server Port		8000	0.0.0.0	8000	Inactive
			HTTPS Port	12	443	0.0.0.0	443	Inactive
a	Live View	100						
Q	R6-232							
	POS							
90	System Service	>:						
			-					

1. Open the Network Settings menu. Go to Menu | Configuration | Network | TCP/IP | NAT.

- If your router supports UPnP and you want to configure it for port forwarding, check the Enable box. NOTE: To use UPnP, UPnP usually must also be enabled in the router.
- 3. Open the Mapping Type drop down list, and then select either:
 - Auto: This option automatically sets the External Port numbers for the recorder. The Ports (internal network ports) used by the recorder for HTTP (80), RTSP (1050), Server (8000) and HTTPS (443) remain at their default values. The new external port numbers will appear on this display. Use these ports numbers when establishing a connection to the recorder from outside the local network.
 - Manual: This option allows you to change the External Port numbers by clicking the icon in the Edit column for the HTTP, RTSP, Server and / or HTTPS ports. The Ports (internal ports) remain unchanged.
- 4. If settings in this menu were changed, click Refresh, and then click Apply to save the changes.

SECTION 11 System Maintenance

The Maintenance menus provide several displays that report system device information, log information, and network traffic. Features also include the export and import of the system configuration file, firmware upgrade, and factory reset.

11.1 System Information

The System Information displays include status reports of the NVR, cameras, record settings, the network and the HDDs. The configuration settings shown on these displays can only be changed in other areas of the menu system.

1. Open the Device Information display for the NVR. Go to Menu | Maintenance | System Info | Device Info.

		Maintenance	
(1) System into ~	Device Name	Network Video Recorder	
Device Infor	Model	ALLINVR5316P	
Camera	Serial No.	1820180731CCRRC38283244WCVU	
Record	Firmware Version	V4.1.50, Build 180910	
Alarm			
Network			

To view information about other components of the system, click the appropriate link in the left frame.

11.2 Search Log Information, Log Export

System log information is continuously generated and saved in log records. System logs include the following types of entries:

- Alarms events Start / stop motion detection, start / stop tamper detection etc.
- Exception conditions Video loss, illegal login, HDD full / error, IP camera disconnected, network disconnected, etc.
- Information events Start / stop recording, local / network HDD information, HDD S.M.A.R.T., etc.
- Operation events power on, login, local operation logout, etc.

System logs can be searched and sorted for specific entries, and archived for use later. You can also search for video clips through system logs.

11.2.1 Log Search

1. Open the Log Information screen. Go to Menu | Maintenance | Log Information.



- Click on the left Time field, and then use the GUI to select the beginning date and time to search for log entries. Similarly, click
 the right Time field and select the end date and time to search for log entries.
- Open the Major Type drop down list, and select the major type alarms you want to search for. In the example below, All was selected. Each major alarm type has its own set of minor type alarms.

	Maintenance	ය දෙ ෆ
System Kets System Kets Call Internation Constraints Constraints Constraints Constraint Setwork Detects SetWork Detects SetO Operation Set	Marring 2018-08-29 00 00 00 00 2018-09-29 29 99 80 00 00 00 00 00 00 00 00 00 00 00 00	Expert Al
	Sudden Change of Sound Intensity Alarm Stopped	

- 4. In the Minor Type list (see above), check the select boxes for the specific alarms you want to find.
- Click Search. In the example below, the search criterion specified was All Major Type alarms and all Minor Type alarms on 10/12/18.

Ð	System Info	F _1	< Back						Export
3	Construction of the local division of the lo		No.	Major	Time	Minor Type	Paramet	Play	Details
-	Cod Provinsion		1	70	10-12-2018 09 19 27	Power On	INKA.		
89	Import/Export		2	@lef	10-12-2010 00 19 27	Local HDD Information	NIA		0
			3	TO	10-12-2018 09 19 35	Local Operation: Login	MAGA.		C
Ŷ	Upgrade	20	4	A Ex.	10-12-2010 09 19:35	Network Disconnected	PAGA		O
a.,	Detault		- 6 7	Carlos and a second	10-12-2010 09:10:25	Blart Captors	1405		ġ.
- Creater		6	Qint	10-12-2010 09 19:45	IP Camera Connection	N/A			
1	Network Detecti	2	7	@ Int	10-12-2019 09 20:01	HOD SMART.	NGA		0
-			0	A.Ex.	10-12-2018 09:20:02	IP Camera Disconnected	NIA	*	0
θĐ.	HDD Operation	80	9	A Ex.	10-12-2018 09 20 02	Video Loss Alarm	PAGA		0
			10	Qirt.	10-12-2018 09 20 30	IP Camera Connection	NIA		O
			11	Out_	10-12-2018 09 20:31	Start Capture	N/A		0
			12	@kd	10-12-2018 09 20:31	IP Camera Connection	NIG.		0
			13	@kd	10-12-2018 09 20:34	IP Camera Connection	P-404		0
			54	Ord.	10-12-2018 09:20:37	IP Camera Connection	P404		0
			16	OAL	10-12-2010 09:20:37	Motion Detection Started	P406		

In the search results list, multiple pages of log entries might be presented here. Use the icons in the lower left corner to navigate between pages. Up to 1000 alarm entries can be displayed from a search.

- 6. To view more information about a specific log entry
 - Double click on the alarm entry.

						Click	icon tọ s	see vide	0
					Mainten	ance		¢	1 C
1	System Info	ĸ	< Back						Export
	Log information		Log In	formation	Time	Minor Type	Parame	Puy	1 Details
E.	Import/Export		Time Type		10-12-2018 09:19:35 InformationStart Captur			1\ =	0
Ŷ	Upgrade	2	Local U Host IP	Iser Address	N/A N/A				0
Θ,	Default		Camera	eter Type a No	D1				0
æ	Network Detecti	20	Carner	ra D1 starts c re enabled. Ve	apturing. Capture status:		100	1.1	0
圆	HDD Operation	₿2	Event Captur	parameters: D ring type: Com	isabled mand Triggered			:	0
			Alarm	detected on ca of celate log	amera: None 0				0
								1	0
			-		Prevaous	Not	OK		0
			14	ON.	10-12-2018 09:20:37 10-12-2018 09:20:37	IP Camera Connection Motion Detection Started	P464		0
_			Total 1	922 P. 1/20				5 3	00

7. If the log entry includes an icon in the **Play** column, video is associated with the entry. Click the icon to watch the video.



11.2.2 Log Export

You can export the log information resulting from a search (see "11.2.1 Log Search" on page 157) to a backup device such as a USB storage device. The exported log file is in .txt format and readable with an ASCII text viewer such as Microsoft® Windows® Notepad or Wordpad. The filename, prefixed with the date and timestamp, in the format *YYYYMMDDHHMMSSlogBack.txt*. To export the log file:

Click to Export

- 1. Perform a Log Info search for information you want to save.
- 2. To export the search result to a flash drive, insert the flash drive into any unused USB port on the NVR.

				æ	F. C				
D	System kito	» <	Back						Export
-	-		No	Major I	Time	Minor Type	Paramet	Play I	Octats
	Log wormidon			10					
84	Import/Export		2	a kri	10-12-2018 09 19 27	Local HDD Information	NIA.	1.60	O
			3	TO	10-12-2018 09 19 35	Local Operation: Login	M464		C
Q.	Upgrade	2.	4	- Ex.	10-12-2010 09 19 35	Network Disconnected	PLGA.		O
à.	Default		5	Chint	10-12-2018 09 19 35	Start Capture	N464	*	O
	12222		6	Old_	10-12-2010 09 19:45	IP Camera Connection	PAGE		0
1	Network Detecti	.	7	@int	10-12-2010 09 20:01	HOD SMART.	NGA		0
-			03	A.Ex.	10-12-2018 09:20:02	IP Camera Disconnected	NICA		0
(B)	HDD Operation	20	9	A Ex.	10-12-2018 09 20 02	Video Loss Alarm	PAGA		0
			10	@int	10-12-2018 09 20 30	IP Camera Connection	NIA		0
			11	@inf_	10-12-2018 09 20 31	Start Cepture	NIA.		0
			12	@int_	10-12-2018 09 20:31	IP Camera Connection	NUCA		0
			13	@ trd	10-12-2010 09 20 34	IP Camera Connection	P464		O
			14	Old	10-12-2018 09:20:37	P Camera Connection	M464		0
			15	OAL	10-12-2018 09:20:37	Motion Detection Started	PAGE		0

3. In the Search Result window, click the Export button.

-2	3					Mainter	ance				¢	± (
Ð	System Info	ĸ	< Back									Export
			No.	Majo	r Time		Minor Typ	pe	1	Paramet	PLIY	Details
8	Log watermacon		1	T.	System Log	Export		×	1	NA		
84	Import/Export		2		Owners him	LICE Frank D			1	NIA		0
			3	-	Lievice real	COD FIRST C	tan t	- 14		NIG.		C
Ŷ.	Upgrade	2.	4		Name	SI Ty	Edit	I D		NIG		O
5			67	-	- I	F	07-2	× .		1405		Ċ1
	Deraut		6	•	· .5.	.F	01-1	*		NA		0
Ð	Network Detecti	20	7			F	02-2	×		NIGA		
			8		T	P	01-1	×	10	NA		0
93	HDD Operation	80	9	-	a 11	F	02-2	×	1	NUA		0
			10		Ali	F	01-0	*		NA		0
			11	-		1.000				PH/A		0
			12	-	New Fold	Hit Erase	Free Space	5802.67MB		BACD.		0
			13	-			Export	Back		B40A		0
			1	-	10.15	2018-00-20-22	ID Came	ra Connection		6100		00
				-	10.12	2010 00 20 37	Makes D	alertine Charl				

4. In the **Log Export** window, hover the mouse over the directory entry (see left window below) in the list to see the directory name. Double click on the directory in the flash drive where you want to save the search results (see right window below) to select the directory.

System Log	Export		\times
Device Na	USB Flash (Disk 1 -	*.64 · 📿
Name	ŚL. I TY	I Edit	1 D 1
- L. L	Exported files	07-2	*
a .s.,	F	01-1	×
- T	F	02-2	×
T	F	01-1	×
a .fs	F	02-2	×
= Ali	F	01-0	×
6			
New Fold	[?] Erase	Free Space	5802.06MB
		Export	Back

System Log I	Export						×
Device Na	USB F	lash D	lisk	1. •	•	bd -	2
Name	Si	Ту	I)	Edit	1	D	1
•							
e C		F		07-2		×	
New Fold	Et Era	-	E	we Soar		5802 0	IEME
140491-040.	. ej cia	30		ee opac		0002.0	CIMIC
				Export		Ba	ck

5. Click the **Export** button to save the search data. The export status is shown (see left window below). You can hover the mouse over an entry in the folder (see right window below) to see the file name.

System Log I	Export			×
Device Na	USB Flash	Disk 1 +	*.bt ·	2
Note				
	Logs ex	ported.		
- New Fold	Lib Eress	Erro Con	OK.	
New Fold.	e Erase	Free Spa	te 5802.0	i6MB



6. Click **Back**, and then remove the flash drive from the NVR.

11.3 Export system configuration

You can export the NVR configuration, then import the file later to restore the earlier configuration if needed. Use this procedure to backup your system settings whenever the configuration is changed. The configuration backup file a binary file with a timestamp in the format *devCfg_<code>_YYYYMMDDHHMMSS.bin*. You must be logged into the NVR as the system administrator to perform this procedure.

- 1. Plug an USB storage device, such as a USB flash drive or USB disk drive, into an NVR USB port.
- 2. Open the Import / Export menu. Go to Menu | Maintenance | Import/Export.

				N	Aaintenanc				
1	System loto	R)	Device USB F	lash Disk -	Fée For*t	in -			C Refresh
	Log Information		+ New Folder	3 import	Export		Total F	ree Capacity	5001.45MB
13	Import/Export		Name	Garas E-Exported files	Type	Modify Date	Delete	Play	1
1.0		-	- I_Export		Folder	10-12-2018	ж		
Ŷ	Upgrade	$\mathbb{P}_{\mathbb{Z}}^{\times}$	Gotlight		Folder	01-10-2018	-		
-	1000000		- Tempor		Folder	02-22-2018	×		
-04	Default		- Trashes		Folder	01-10-2018	×		
CD	Network Detecti	-	a fseventsd		Folder	02-22-2018	-		
~			Alibi With		Folder	01-08-2018	×		
圆	HDD Operation	85	- Headshots		Folder	01-11-2018	*		
			= Logos		Folder	02-09-2018	*		
			= System		Folder	08-16-2017	×		
			- Temp		Folder	07-16-2018	*		
			- Timelines		Folder	02-12-2018	×		
			 Video Sr. 		Frider	02-21-2018	*	100	

- 3. Click Refresh if necessary to locate the flash drive. The name list shows the folders available on the flash drive.
- Locate the folder where you want to save the configuration file, and double click on it to open it. You can hover the mouse over the directory entry in the list to see the directory name (see above).
- 5. Double click on the directory in the flash drive where you want to save the configuration file (see below).



 Click the Export button (see callout above). In the popup Export Encryption window, enter your administrator password, and then click OK to perform the export.



Export Encryption	•	
Password		

7. A Note popup window will show the export status.



8. You can hover the mouse over the file to see the filename.

3				n	Maintenance				
1	System kilo	ĸ	Device USB	Flash Disk -	File For	n -			3 Refresh
	Log Information		+ New Folder	3 import	1 Export		Totai	Free Capacity	5000 23MB
Ð	Import/Export		Name	Size	Type Folder	Modify Date 01-01-1070	Delete	1 Play	N.
♀ ● □	Upgrade Default Network Detection	14 N 14	Channel devCfg	de-/CfgC39283 213283	244_2818101 0 มมา	07-26-2018 -	×		

11.4 Import system configuration

You can import a system configuration file you saved earlier to restore your NVR to that state. See "11.3 Export system configuration" on page 162 for more information. The procedure below uses the configuration file created above to restore the system. You must be logged into the NVR as the system administrator to perform this procedure.

- 1. If the configuration file you saved is on a flash drive, insert the flash drive into an unused USB port on your NVR.
- 2. Locate the file on the flash drive and select (highlight) it.

				\ ∾	laintenance				
1	System Info	E.	Device USB	Flash Dick	File For. * bin	Ţ.			C Refres
	Log Information		+ New Folder	(12 import a	S Export		Totai P	ree Capacity	5000.23MB
ß	ImportFood		Name	Size.	Type	Modify Date	Delete	1 Play	E
		-			Folder	01-01-1970			
Ŷ	Upgrade	$\mathbb{P}_{i}^{(i)}$	Channel		Folder	07-26-2018	*		
а,	Default		aevCtg	1240.8468	Elle	10-12-2018		-	
1	Network Detecti	*							
100	HDD Operation	1.							

Click to Import

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 Click the Import button (see callout above). In the popup Import Encryption window, enter your administrator password, and then click OK to perform the export.

Import Decryption	• ×	Import Decryption	
assword	••••••••••••••••••••••••••••••••••••••	Password	
	1 2 3 4 5 6 7 8 9 0		
	qwertyuiop		
	asdfghjkl		
	O z x c v b n m 🖂		
	1271	OK	

 After the configuration file is imported, a system reboot is required. Follow the on-screen instructions to complet the procedure.

					Maintenance					
() Sys	item info	ĸ	Device USB FI	lash Disk -	File For. * b	n	÷.			C Refresh
📄 Log	Information		+ New Folder	(3 import	(1 Export			Total P	ree Capacity	5000.23MB
& mo	orbExport		Marne	Size	Type	Modify	Date	Delete	1 Play	1
1					Folder	01-01-	1970			
Opt Upp	yade	20	Channel_	Confirm			18	*	10	
R ₀ Def	nult		devCfg		Sustem will rehost		110.	. *		
100 1000	work Detecti.	»)		?	automatically after Continue?	importing				
A HO	D Operation	80								
					Yes	No				

11.5 Upgrade Firmware

You can upgrade the firmware through a local device or FTP server, or from the cloud when Platform Access is on. You should check the current Firmware version before upgrading your NVR firmware. **Firmware upgrade should only be performed when recommended by your support organization.**

1. To check the current firmware version, open the System information display. Go to **Menu | Maintenance | System Info |** Device Info.

		Maintenance	ф ± (с
 System into 	Device Name	Network Video Recorder		
Device Infor	Model	ALI NVR5316P		
Camera	Serial No.	1820180731CCRRC38283244WCVU		
Record	Firmware Version	V4.1.50, Build 180910		
Alarm				
Network				

2. Find the firmware version of your recorder on the **Device Info** screen. If a newer version exists, you can install it from a local flash drive or from a server.

Local Upgrade - from flash drive

You can upgrade the firmware in your recorder from a local device such as a flash drive:

- 1. Insert a flash drive with newer NVR firmware into an unused USB port of your recorder.
- 2. Open the Local Upgrade menu. Go to Menu | Maintenance | Upgrade | Local Upgrade.

				Maintenanc	e			
1	System kito	ĸ	Device USB Flash Disk +	File For	dav;* mav;* ias -			C Refresh
	Log Information		(1) Upgrade					
19	Import/Export		File Name File Size	File Type	Edit Date	Delete	1 Play	(E)
1			- I_Esport	Folder	07-26-2018	ж		
Ŷ	Upgrade	\sim	Spotlight	Folder	01-10-2018	×		
-			Tempor	Folder	02-22-2018	×		
_	Local Upgrade	۰.	- Trashes	Folder	01-10-2018	×		
	FTP		fseventsd	Folder	02-22-2018	-		
		-	- Alibi With	Folder	01-08-2018	×		
Θ_0	Detault		- Headshots	Folder	01-11-2018	×		
-			- Logos	Folder	02-09-2018	×		
(EX	Network Detects	2	- System	Folder	08-16-2017	×		
(3)	HDD Operation	3	- Temp	Folder	07-16-2018	*		
			- Timelines	Folder	02-12-2018	×		
			- Video Sit	Friday	02-21-2018			

- 3. Click the Refresh button (located at the top of the menu), and then navigate to the folder that contains the new firmware.
- 4. Click the firmware file you want to load. The firmware file normally has the file name extension .dav.
- Click the Upgrade button, the follow the on-screen instructions for completing the upgrade. The upgrade may require a reboot of the recorder.
- 6. Allow the upgrade operation to complete before continuing.

11.5.1 Upgrade from FTP server

If an FTP server contains the firmware upgrade file and the recorder has network access to that device, you can upgrade directly from that location. To upgrade from and FTP server, do the following:

1. Open the Upgrade FTP menu. Go to Menu | Maintenance | Upgrade | FTP.

1997			Maintenance	ය ප ()
1	System kilo	×.	FTP Server Address	
	Log Information		Upgrade	
89	Import/Export			
Ŷ	Upgrade	×		
	Local Upgrade			
	ere X			
\oplus_p	Default			
Ð	Network Detecti	s.		

- 2. Click in the FTP Server Address field to open the virtual keyboard, and then enter the IP address of the server.
- 3. Click the **Upgrade** button at the bottom of the window, and follow the on-screen instructions to complete the upgrade.

11.6 Default - restore NVR

The default options enable you to revert the configuration to its original settings in one of three ways. A reboot is often required to complete the operation.

To restore the device to a default configuration:

1. Open the default options menu. Go to Menu | Maintenance | Default.



- 2. Click one of the following options:
 - Restore Defaults: Restore all parameters, except the network (including IP address, subnet mask, gateway, MTU, NIC working mode, default route, server port, etc.) and user account parameters, to the factory default settings.
 - Factory Defaults: Restore all parameters to the factory default settings.
 - Restore to Inactive: Restore the device to inactive status.
- 3. Follow the on-screen instructions to complete the restore operation.

11.7 Net Detect

11.7.1 Checking Network Traffic

You can see real-time information of your NVR network traffic, such as linking status, MTU, sending / receiving rate, etc. The traffic data is refreshed every 1 second.

1. Open the Network Traffic menu. Go to Menu | Maintenance | Net Detect.

		Maintenand		
System kdo System kdo Log Information	LAN1		Sending Obps	Receiving 20Kbps
¹ Opgrade ¹ Default ¹ Network Detects			M	m
Traffic Network Detecti Network Stat	Narse LAW	Linking Status Bucceeded	Tiyen Ethiornet	MAC Address 60 03 fb 2c a2-30

11.7.2 Testing Network Delay and Packet Loss

1. Open the Network Traffic menu. Go to Menu | Maintenance | Net Detect | Net Detection.

			Maintena	nce			
1	System loto	Network Delay, Packet Los	ss Test				
	Log Information	Select NIC	LANI				
89	Import/Export	Destination Address	192.188.3.65	Test	1		
Ŷ	Upgrade >	Network Packet Export					
Θ,	Default	Device Name	USB Flash Disk 1-1	- Refresh	Status		
	Network Detection	LANI	192 168 3 87	TOPOps	Export		
	Traffic						
	Network Detecti						
	Nebwork Stat						
	HDD Operation >						

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- Click on the Destination Address field, and then enter the destination IP address the field. In the screen above, the address 192.168.3.65 was entered.
- Click the **Test** button to begin the test for network delay and packet loss. The testing result appear in the window. If the testing failed, the error message box will open.

Result	
1	Average delay: 0 ms Packet loss rate 0%
	OK

11.7.3 Exporting Network Packet

By connecting the NVR to network, the captured network data packet can be exported to a USB device such as a flash drive, HDD, DVD-R / W and other local USB backup devices.

1. Open the Network Traffic menu. Go to Menu | Maintenance | Net Detect | Net Detection.

			Maintena	ince				
1	System Info >	Network Delay, Packet Lo	oss Test					
	Log Information	Select NIC	LANI					
E9	Import/Export	Destination Address			Test			
Ŷ	Opgrade >	Network Packet Export						
а,	Default	Device Name	USB Flash Disk 1-1	•	Refresh	Status		
Ð	Network Detect	LANI	192 168 3.87	16R0ps		E-port		
	Traffic							
	Network Detecti.							
	Network Stat							

- Insert a USB device such as a flash drive, HDD, DVD-R / W and other local USB backup devices into a USB port on the NVR, and then click Refresh.
- 3. Select the backup device from the Device Name drop down list. USB Flash Disk 1-1 was selected. See above.

Note: Click the **Refresh** button again if the connected local backup device cannot be displayed. When it fails to detect the backup device, verify that it is compatible with the NVR. Format the backup device if the format is incorrect.

4. Click the **Export** button to start the export.

				Maintenan				
1	System Info	R:	Network Delay, Packet L	oss Test				
	Log Information		Select NPC	LANI				
84	Import/Export		Destination Address	192 168 3.65	Test			
Ŷ	Upgrade	20	Network Exporting					
ю.,	Default		Device N Packet export	ting		Status		
Ð	Network Detecti.		LANI			Export 3		
_	Traffic							
	Network Detecti				Cancel			
	Network Stat							

 When the export is complete, a Note window will open showing the export status. Click OK. Up to 1 M data can be exported during one operation.



11.7.4 Checking the network status

If problems are detected during export operation, check the network configuration. Go to:

```
Menu | Maintenance | System Info | Network.
```

		Maintenance	අ ප ල
 System into 	NC	LANT	
	Port Address	102.168.3.87	
Device Infor	IPv4 Subnet Mask	255.256.255.128	
Comerco	IPv4 Default Gateway	192.168.3.1	
Carriera	IPv6 Address 1	fe80 5a03 foff fe	
Record	IPv6 Address 2		
1000	IPv6 Default Gatevvay		
Alarm	MAC Address	68.00 fb 2c a2.38	
And	Preferred DNS Server	192.168 3.1	
	Alternate DNS Server		
HDD	Enable DHCP	Enabled	
🖹 Log Informati			
(> Import/Export			
© Upgrade ⇒			
0 ₈ Default			
Network Det. >			

11.7.5 Checking Network Statistics

Use the following procedure to view real time network status of your NVR.

- 1. Open the Network Traffic menu. Go to Menu | Maintenance | Net Detect | Network Stat.
- 2. Click the Network Stat. tab to open the Network status report.

	Mai	ntenance	
Sustern Inte	C Refresh		
C opinion of	Туре	bandwidth	
Log Information	IP Camora		
J Import/Export	Remote Live View	0bps	
	Net Receive lide	147Mbps	
🔍 Default	Net Send Idle	256Mbps	
Retwork Detect			
Traffic			
Network Detecti			
Heliwork Stat			
HDD Operation >			
	-		

Use this display to check the bandwidth of the IP Camera, bandwidth of Remote Live View, bandwidth of Remote Playback, bandwidth of Net Receive Idle and bandwidth of Net Send Idle. Click the **Refresh** button to show the current status.

11.7.6 HDD - S.M.A.R.T. testing and monitoring

The HDD Detect feature provides two methods of monitoring the HDD: display of S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) data, and Bad Sector Detection. These methods can be used to assure the normal functioning of the disk, and anticipate failures.

1. Open the S.M.A.R.T. display menu. Go to **Menu | System Maintenance | HDD Detect**. **S.M.A.R.T.** data may be shown on this display.

Ð	System lofo	> Continue to u	se this disk when self-evaluation is	failed				
5	Log Information	HDD No.	-19 ÷					
		Self-Test Typ	e Short Test -	Self-Test	Not tested			
19	Import/Export	Temperatur	31	Self-Evaluation	Pass			
Ŷ	Upgrade	> Working Tim	2	All-Evaluation	Functional			
а,	Default							
		10						
Ð.	Network Detecti	0x1						
-		0.3	Spin Up Time	OK	э	o	100	
	HLLD Operation	0.04	Start/Stop Count	OK	32	20	100	
		0.5	Reallocated Sector Count	OK	33	36	100	
		0×7	Seek Error Rate	OK	+	30	100	
	Bad Sector Det	0.9	Power-on Hours Count	OK	32	0	100	
	HDD Close	0 ca	Spin Up Retry Count	OK	13	97	100	
	The second res	0xc	Power Cycle Count	OK	32	20	100	
	Health Detection	0.458	Unknown Type Value 184	OK	32	00	100	

- 2. To execute a self-evaluation test on an HDD:
 - a. On the HDD line, open the drop down list to select the HDD you want to test.
 - b. On the Self-test Type line, open the drop down list to select the type of test to execute. You can choose either Short Test, Expanded Test or Conveyance Test.
 - c. Click the **Self Test** button to execute the test. Allow the test to complete before continuing. The result of the test is shown on the Self-evaluation line.

y.,	System kife	R:	Continue to use	this disk when self-evaluation is f	alled			N.	
s:	Log Information		HDD No	10					
			Self-Test Type	Short Test -	Self-Test	Self-test suc	ceeded		
3	Import/Export		Temperatur	31	Self-Evaluation	Pass			
2	Upgrade	20	Working Tim	2	All-Evaluation	Functional			
ι.	Default								
			10						
₽.	Network Detecti	2	0.01						
	UDD Constant		0.3	Spin Up Time	OK	э	ø	100	
29.1	HOD Operation		0.04	Start/Stop Count	OK	32	20	100	
			0×5	Reallocated Sector Count	OK	33	36	100	
	and the second		0×7	Seek Error Rate	OK	+	30	100	
	Bad Sector Det		0.9	Power-on Hours Count	OK	32	0	100	
	HDD Close		0 km	Spin Up Retry Count	OK	13	97	100	
	1.000.000		0xc	Power Cycle Count	OK	32	20	100	
	Health Detection		0-b0	Uninteen Type Value: 184	OK	32	00	100	

Examine the S.M.A.R.T. data provided for the HDD. Check to ensure that the data in the value and Worst column does not exceed the data in the Threshold column.

NOTE *S.M.A.R.T. data provided by each HDD manufacturer is usually different. Refer to the manufacturer's website for S.M.A.R.T. data definitions.*

11.7.7 HDD - Bad Sector Detection

- 1. Open the Bad Sector Detection menu. Open the Menu screen, and then click the Maintenance icon.
- 2. In the left frame, click HDD Operation to open the options list, and then click Bad Sector Detection.
- 3. At the top of the menu, open the HDD No. drop down list and select the HDD you want to test.
- 4. Check the select box for either All Detection or Key Area Detection.
- 5. Click the **Self Test** button to begin the test. Bad sectors are identified in the array as red colored cells.

al.					Maintenance			4	
0	System kito	E.	HDD No. 1	-	All Detection	- Key Area Det	Self-Test	Resume	Cancel
1	Log Information		Functio B	ad 📒	Shield				
14	Import/Export			•			Detecting		Paused
2	Upgrade	20					HDD Cap	01.62GB	
	Deter						Block Size	232 99MB	
	L/EFOUR						Error Count)	
B.	Network Detecti	28							
9	HED Operation	~					Error edur	mation	
	SMART								
	Bad Sector Det.	- 8							
	HDD Clone								
	Health Detection								

Click **Pause** to temporarily stop the scan, and click **Cancel** to end the scan.

Click Error info to see the detailed damage information.

11.8 HDD Disk Clone

The Disk Clone feature is used to copy an internal HDD to a writable storage device connected to the eSATA port. The capacities of the source drive (internal HDD) and the eSATA storage device must be the same.



- When cloning an internal HDD source drive to the eSATA storage device, no data can be written to the source drive.
- The cloning operation for a typical internal HDD can take several hours.

To use this feature:

1. Open the Disk Clone menu. Go to Menu | Maintenance | HDD Operation | Disk Clone.

System Mit System Mit System Mit Lobit 1 Capacity 1 Status 1 Property 1 Type 1 Property 1 Onco Log Mitemation 2 1053 520.0 Homat MVV Local 1057 000.0 1 Vagardie > 1053 520.0 Homat RVV Local 1057 000.0 1 Vagardie > 1050 S20.0 Homat RVV Local 1057 000.0 1 Vagardie > Network Detect> Network Detect> SMA.R.T Bad Sector Det SMA.R.T EGATA1 * Moment Health Detection 63.17.1 (EATA1) * Moment Course				Maintena				¢ ∓ (
Judie II of Capacity 1 status Property Type Free Space 1 couple Log Information 3 1003 S200 Normal ANN Local 97/3000 1 2 1003 S200 Normal RNV Local 1057.0000 1 2 1003 S200 Normal RNV Local 1057.0000 1 3 Network Detection SMAR.T Bad Sector Det Conce Destination Health Detection eSATA eSATA1 * Network Detection	2	Clone Source						
Log Mitemation R1 911 50261 Hermal MVV Local 977 50000 I 2 1083 5208 Hermal RVV Local 1087 5008 I 2 Upgrade > Network Detector I <	D System key	Label	Capacity	l Stirtus	Property	Type	Free Space	Group
2 1883.020B Normal RVV Local 1887.000B 1 2 Upgrade > 1887.000B 1 2 Upgrade > 1887.000B 1 3 Upgrade > 1887.000B 1 <td>Log Information</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Log Information							
Vograde > Default > Potevark Detects > MART > Bad Sector Det - Health Detection eSATA realth Detection S31.820B	S Import/Export	2	1063.0208	Normal	RAW	Local	1857.0008	т
Default 2 Network Detects 3 NetWork Detects 3 MART Bad Sector Det. 1600 Conne eSATA eSATA eSATA Capacity 931 8208	> Upgrade							
Probuon: Detects > HDD Operation S MART Bad Sector Det. HOD Course eSATA eSATA resatt Capacity 931.820B	Default							
HDD Operation SMART SMART SMART Bad Sector Det. Edit Sector Det. HDD Clone eSATA eSATA Health Detection Capacity 931.820B	Network Detecti							
S MAR T Bad Sector Det. Hoath Detection Health Detection Capacity 931.520B	HDD Operation	5						
Bad Sector Det IdOn Clove Cone Destination eSATA eSATA eSATA eSATA solution cApacity 931.520B Cone Cone Cone	SMART							
HOD Clust Ckne Destination Health Detection eSATA eSATA1 > Investig Health Detection Capacity 931.820B Convert	Bad Sector Det							
eSATA eSATA1 - Heidenb Capacity 831 520B Cleve	HDD Clone	Clone Desti	nation					
Heath Detection Capacity 631.5208 Conve		eSATA	eSATA1			(e		Robush
	Health Detection	Capacity	031.520B					Clone
- 2. Attach a destination storage device to the eSATA connector on the NVR back panel.
- In the Disk Clone menu, check the select box for the internal HDD you want to clone. In the screen above, the select box for HDD 1 is checked.
- 4. Open the eSATA drop-down list, and then select the eSATA port where the destination storage device is attached.
- 5. Click Clone.
- 6. Allow the operation to complete before continuing.

11.9 System Service options

System Service options enables you to control remote access to the different streaming protocols in the system.

11.9.1 System Service

Use the System Service menu to enable/disable remote streaming and/or connectivity.

1. To open the System Service menu, go to Menu | Configuration | System Service | System Service.

			Configuration	¢	Ł	ധ
	General User Network Live View RS-232 POS System Service Cystem Service ONVIF Stream Encrypti. More Settings	Enable RTSP RTSP Authentication Type Enable ISAPI Enable HTTP HTTP Authentication Type Enable IP Camera Occup.	digest			
-	_					

- 2. Uncheck the box(es) next to the protocols to disable those features.
- Open the RTSP Authentication Type and HTTP Authentication Type drop down lists, and select either digest or digest&basic as required by the remote client.

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l				Configuration	¢	Ł	ப
	General User Network Live View RS-232 POS System Service System Service	> >	Enable RTSP RTSP Authentication Type Enable ISAPI Enable HTTP HTTP Authentication Type Enable IP Camera Occup	Strate • doest digest x	A		

	Configuration	ද් ය ථ
Control Contr	Enable RTSP RTSP Authentication Type Enable ISAPI Enable HTTP HTTP Authentication Type Enable IP Camera Occup digest	

4. Click **Apply** to save the new settings.

11.9.2 ONVIF

ONVIF enables the recorder to be discovered and added to other VMS clients as an ONVIF device. Access to the device is controlled by user authentication.

1. To open the ONVIF menu, go to Menu | Configuration | System Service | ONVIF.

			Configu	ration		æ 🕹 (ט
۲	General	Enable ONVIF					
മ	User	No. User N	ame	Security	Level	Eat D	
	Network	>					
R	Live View	3					
Q	RS-232						
	POS						
	System Service	~					
	System Service						
	ONME						
	Stream Encrypti						
	More Settings						
-	_	Add	Apple				

- 2. To enable the ONVIF feature, check the select box, and click Apply.
- 3. To create users who can access the device, click the **Add** button, and follow the menu to register a **User Name** and **Password**.

11.9.3 Stream Encryption

Stream encryption is used to encrypt the streams for live view, playback, download, backup, etc. to improve the security of your system. The stream encryption password is synchronized with the Alibi Connect service verification code. After enabling the encryption code, the Alibi Connect stream will be forcedly encrypted. Make sure your Alibi Connect service supports stream encryption. To use Stream Encryption:

1. Open the Stream Encryption menu. Go to Menu | Configuration | System Service | Stream Encryption.

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					Config	guratio	n			æ		Ċ
	General User Nebwork Live View RS-232 POS System Service ONVF Sbream Encrypti More Settings	Change Encrys > str >	e Password tion Password ie stream encryption cryption code, the ream decryption.	bion key is e Alibi Con	synchroni	zed with the	Alibi Connec	t service ventification	cation code. Aft	er enablin	ng the	ports
_	_		Apply									

- 2. Check the select box to enable **Stream Encryption**, and then enter an encryption code in the field shown.
- 3. Click Apply.

11.9.4 More Settings

More Settings menu includes two tabs:

- The I-VIEW-NOW UPNP Reporting is a video verification service that works with numerous central stations for video
 verified alarm responses. Check with your central station provider to verify support and if you are able to offer this service. If
 applicable, check the box to enable UPnP reporting to link the recorder to the central station service.
- The Control4 is a home automation provider. Enabling the SDDP and CGI commands allow the Control 4 system to make changes to the HDMI display out on a display. A user credential must be created and the appropriate Control 4 driver must be installed to support the NVR.

I-VIEW-NOW UPNP Reporting

 To open the More Settings I-VIEW-NOW UPNP Reporting menu, go to Menu | Configuration | System Service | More Settings.

			Configuration	æ	Ċ
0	General		I-VIEW-NOW UPNP Reporting Control4		
2	User				
	Network	->			
R	Live View	:>:			
\bigcirc	RS-232				
	POS				
R	System Service	~			
	System Service				
	ONVIF				
	Stream Encrypti				
	More Settings				
	_		Acqui		

- 2. To use I-VIEW-NOW UPNP Reporting, check the select box shown above.
- 3. Click Apply.

Control4

- 1. To open the More Settings Control4 menu, go to Menu | Configuration | System Service | More Settings.
- 2. Click the **Control4** tab.

	8			Configurat	ion		聋 😃	ധ
0	General		I-VIEW-NOW UPNP Reporting	Control4				
മ	User		Enable SDDP	151				
۲	Network	-	Enable CGI					
a	Live View		No. User Name		Security	Edit	Delete	£
Ş	R5-232							
	POS							
R	System Service	~						
	System Service							
	ONVIF							
	Stream Encrypti							
	More Setbogs							
			Add					

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- 3. To use **Control4**, check the select box for **Enable SDDP** or **Enable CGI**.
- 4. Click Apply.
- Click the Add button, and then follow the on-screen instructions setup the credentials for user access to the devices added to Control4

				Configuration		æ	ڻ ک
0	General	-	VIEW-NOW UPNP Reportir	ng Control4			
2	User		Add User 6		×		
	Network	>	E User Name	User Name	1		
R	Live View	(a)	Password	Create Password		Edit D	elete I
\bigcirc	R5-232						
	POS		Contirm	Comm			
(R	System Service	~		Note: Valid password range [8-16]. You can use a combination of numbers, lowercase,			
	System Service		1	uppercase and special character for your password with at least two kinds of them contained.			
	ONVIF						
	Stream Encrypti.			OK C	ancel		
	More Settings						
-			Add 🧎	Norma			

6. Click Apply.

SECTION 12 Managing HDDs

NVR storage (HDDs) is highly configurable. You can simply save data to the internal HDD(s) in the chassis, or add network based NAS or IP SAN devices to the system and save recordings and other data there. You can also define where data for each camera or groups of cameras is saved, and have 16 different storage groups. Before an HDD is used by the NVR, it must be initialized by the recorder. Preconfigured HDD(s) are already initialized.

If you add an internal HDD to the recorder, or replace an HDD in the recorder, it must be initialized before it can be used. See "12.1 Initializing HDDs" on page 179 for more information.

12.1 Initializing HDDs

An HDD must be initialized before it can be used by the recorder to store data. Pre-installed HDDs are initialized by your vendor. Check the status of the HDD installed in the NVR to assure it is functioning normally.

1. Open the HDD Storage Device menu. Go to Menu | Storage | Storage Device.

				7	Storage					* ±	
	Recording Sche	+ Add		2 ing			То	tal Cap. 2794,53GB	Free	Spa _ 273	4.00GE
	Capture Schedule		Label	Capacity	Status	Prop.	Туре	Fme Space:	Or	Edit	D
в.	Storage Device		2	931.52GB 1663.02GB	Normal	RAV	Local	877.00GB 1857.00GB		-	×
3	Storage Mode			Initialize							
9	Advanced			A Initials	tation will eran	ie all data ue?					
±	Holiday										
				OK		Cancel					

- 2. Check the status of the HDD. If the status is:
 - Normal or Sleeping The HDD is working normally.
 - Uninitialized or Abnormal Initialize the HDD before continuing. Check the select box of the HDD to initialize, then
 click the Init button at the bottom of the screen.
 - Failed If the HDD failed during or after initialization, replace the HDD.
- If the Status is Uninitialized, Abnormal, or you installed a new HDD in your NVR chassis, select the HDD in the window then click the Init button to initialize it for use. Allow the initialization procedure to complete before continuing.

12.2 Adding network HDDs to the system

Additional file storage can be added to your NVR using up to 8 NAS disks, or up to 7 NAS disks with 1 IP SAN disk. Currently, 8TB is the maximum drive size supported for each disk. The NAS device must support NFS and Unix / Linux file formats. To configure this storage:

- 1. Open the HDD Information interface. Go to Menu | HDD | General.
- 2. Click the Add button at the bottom of the screen to open the Add NetHDD menu.

			Storage				2 م	
Recording Sche Capture Scheaule Capture Scheaule Scheage Node Scheage Mode Advenced Holdsy Holdsy	+ Add	⊡ Init Custom Add NetHDO Type NetHDO IP NetHDO Dre…	Storage NetHCO 1	Total Ca Search	p., 2794,53GE Lee Space 77.8GGB 857.00CB	1 Or 1	5pa 2773/ 1 Edd - -	
			OK	Cancel				

- 3. In the NetHDD drop down list, select the NetHDD ID (NetHDD 1 .. NetHDD 8) you want to add.
- 4. In the Type drop down list select either NAS or IP SAN.
- 5. Configure the device type you selected.

12.2.1 For a NAS disk

Currently, 8TB is the maximum drive size supported for NAS disks.

i. Click the NetHDD IP Address field to open a virtual keyboard and enter the IP address of the storage device.

letHDD						and the second se					
	NetHDD 1		19			NetHDD	Net	HDD 1		+	
уре	NAS		-			Туре	NAS	s		-	1
HIDD IP	192 168	. 3	- 05			NetHDD IP	192	168	. 3	. 85	
letHDD Dire	1	2	3		114	Network Dive	and the	-	ted 1		diameter
	4	5	6	-	()¥						Dearc
	7	8	9	1	0	No. Directory	a Tart				
		0	#+=	<	E						
	ABC	-	D D	<	3-4						

- ii. Click the **Search** button to search for available NAS disks.
- iii. Select the NAS disk directory from the list shown, or manually enter the directory in the text field of NetHDD Directory.

NetHDD	NetHDD 1	+:
Type	NAS	-
NetHDD IP	192 188 3 85	
NetHDD Dire	.mmsDisk-1/unixSet	Search
No. Directory 1 (metDisk-10a)	w.Set	

iv. In the Directory list, select the directory you want to use, and then click **OK** to add the disk to your system. The NAS will appear in the HDD Information menu.

				Maintena				
0	Distant Info	Clone Source	•					
0	oystein keis	Labei	Capacity	Status	Property	Туре	Free Space	Group
	Log Information	-						
		2	1983.02GB	Normal	RW	Local	1857.00GE	1
00	mportrexport	17	1963.02GB	Normal	RW	NAS	1057.00GB	1
Ŷ	Upgrade >							
9,	Default							

12.2.2 For an IP SAN disk:

Configuring an IP SAN NetHDD is similar to configuring a NAS. See "12.2.1 For a NAS disk" on page 180 for more information.

- 1. In the Add NetHDD window, click the Type field, then select IP SAN.
- 2. Enter the NetHDD IP address in the text field.

NetHOD	Pliet	HOD 2			
Туре	PS	IAN		-	1
NetHDD IP	192	198	. 3	104	
And Print Prints					-
VEHOD DVE					Search
ABHOD DVP					Search
dendo bre					Search
and dre					Search

- 3. Click **Search** to discover the available IP SAN disk directories on the network.
- 4. Select the IP SAN disk directory from the list shown below.

a. Select the directory you want to use, and then click **OK** to add the disk to your system.



If the added NetHDD is uninitialized, select it and click the **lnit** button for initialization. Initializing an storage device erases all data saved on the disk.

 Add additional disks as needed up to a maximum of 8 NAS, or 7 NAS and 1 IP SAN. Note that HDDs added to the system may need to be initialized before use. See "16.2 Checking HDD status" on page 214 for more information.

12.3 Configuring the HDD Partition / Group mode

By default, all cameras will record to the one partition(s) of the internal HDD(s). However, the NVR can be configured to allocate space in one of two modes:

- Partition mode: Each camera can be allocated it's own recording space on a storage device (HDD).
- Group mode: Groups of cameras can each be allocated recording space on a storage device or devices. Configuring the HDD
 for Group recording mode requires an NVR reboot. You must have at least two HDDs (including internal and NAS / IP San HDDS
 added to the system) to configure Group mode.

12.3.1 Partition Mode recording

In Partition Mode recording, each camera can be allocated it's own recording space on a storage device (HDD).

1. Go to Menu | Storage | Storage Device.

					Storage							
	Recording Sche	+ Add		⊘ Init.			Та	təl Cap. 2794 53GB	Free	Spa 2721	0068	
	Capture Schedule	-	Label	Expandity	Establis I Normal	Prop. RAN	Type	I Free Space I 877.0008	Or.	Edit	D	l
38.		1.1	2	1663.020B	Normal	R/W	Local	1844.00GB	1		×	1
	Storage Mode Advanced											

 Click Storage Mode in the left frame to check the storage mode of the HDD. If you prefer to use Partition mode, do the following:

	Storage	දී ය ල
Recording Sche Capiture Schedule Capiture Schedule Schedule Schedule Schedule Advanced Helday	Mode • Partition Group Camera (D1) ALL+#3015RH • Used Record Capacity 30 000B • Used Record Capacity 8144 00MB • MoD Capacity (08) 2794 • Max. Record Capacity 140 • Max. Record Capacity 140 • Max. Record Capacity 140 • Max. Record Capacity 160 • Pree Partition Space 2594 08 • •	

- a. Open the Camera drop down list and select the camera for which you want to allocate storage space.
- b. Edit the Max. Record Capacity and the Max. Picture Capacity values to specify the space allocated to each. In the above screen, the Max. Record Capacity was set to 140GB.
- c. Click Apply to save the settings.
- d. Repeat sub-steps a through c above for other cameras monitored by the recorder.

12.3.2 Group Mode recording

In Group Mode recording, groups of cameras can each be allocated recording space on a storage device or devices. Configuring the HDD(s) for Group recording mode requires an NVR reboot. You must have at least two HDDs (including internal and NAS / IP San HDDS added to the system) to configure 2 Groups, etc. Additional HDDs can be assigned to other groups or used as redundancy for existing groups. Additionally, an HDD use to record data can be reconfigured to read-only.

In the following example, the HDDs will be configured for Group Mode, with camera channel D1 assigned to Group 1 on HDD 1, and camera channel D2 assigned to Group 2 on HDD 2. To change to **Group** mode from Partition Mode (default), do the following:

- 1. In the Menu | Storage | Storage Device menu (see above), check the select box for the HDD you want to configure.
- 2. Click the Storage Mode Link in the left frame.

Group Mode select box

		Storage	
Recording Sche Capture Schedule Capture Schedule Storage Device Storage Mode Advanced Holiday	Node Camera Used Record Capachy Used Picture Capachy HOD Capachy (98) Marc Record Capachy Marc Picture Capachy Marc Picture Capachy Free Partition Spa	Partson Group (D1) ALL+4P30198H - 20.0008 8144.00MB 2794 40 10 0 cc 2594.08	
	Copy to	Aquaty 5	

3. In the Mode select field, select Group.

					Storag	je					
	Recording Sche	Mode Record on	1	Partition •	Group						
в.	Storage Device	P Cam.		D2 010	D3 D11	D4 D12	D5 D13	D6 D14	D7 015	D8 D16	
8	Otorage Mode										
9	Advanced										

SECTION 12: MANAGING HDDs

- 4. Check the box(es) for the camera(s) you want to add to the group. IP Cannel D1 was selected.
- Click Apply. Since you are changing from Partition to Group, a reboot the system is required. In the Confirm box, click Yes, and then allow the system to fully reboot before continuing.



After the reboot is complete, go to Menu | Storage | Storage Device menu. Notice that in this window, an icon now
appears for each HDD in the Edit column.

					Storage		
	Recording Sche	+ Add	ł.	⊘ Init		Total Cap. 2794 53GB	Free Spa 2720.00GB
-	Cantura Scherkila		I Label	Capacity	Status Prop.	Type Free Space	Or. Edt D.
Can a	Capitore Considered	11.00	1	931.62GB	Normal R/W	Local 877.000B	1 = ×
8	Storage Device		2	1863.0258	Normal RAN	Local 1843-00GB	1
	Storage Mode $= -\chi$						
۲	Advanced						
m	Holiday						

7. To setup Group 2, click the **Edit** icon for HDD 2. the select box for **HDD2**.

						Store	ige							
	Recording Sche	Local HDD Settings										e Spi	272	0000
-	Capture Schedu	HDD No	2									1.1	Edit	D.,
в,	Storage Device	HDD Property	• RA	v		Res	id-only		Re	dundancy			÷	×
3	Storage Mode	Group		• 2	3	14	5	8	7	8				
6	Advanced		9	10	11	12	13	14	15	16				
a	Holiday	HOD Capacity	1063	0208										
		_							OK	A.	Cancel			

8. In the **Group** section, click the select box for Group 2, and then click **OK**. In the Storage Device window, HDD 2 is now Group 2.

					Storage						
	Recording Sche	+ Add		2 Init.			Tota	sl Cap. 2794,53GB	Free :	5pa _ 272	0.00068
•	Capture Schedule	-	Label	Cipacity 931 5206	Status Hormal	Prop. RAN	Type	EFree Space	Gr.,	Edit	1 0. 1
д.	Storage Device	1.11	2	1863.0208	Normal	RW	Local	1843.000B	2	14.1	*
8	Storage Mode										
۲	Advanced										

9. Open the **Storage Mode** menu.

					Storaç	ge					
	Recording Sche	Mode Record on	2	Partition •	Group						
л.	Storage Device	IP Cam	D1 D9	- D2 D10	D3 D11	D4 D12	D5 D13	D6 D14	D7 D15	D8 D16	
8	Storage Mode										1
۲	Advanced										

- 10. Open the **Record on** drop down list, and select 2 (for Group 2, see above).
- 11. Check the select boxes for the cameras you only want to assign to Group 2, and then click **Apply**.

Additional HDDs

For each additional HDD on your system, click its Edit icon in the Storage Device screen. You can:

- Create a new group for cameras not assigned to existing groups (see procedure above)
- Assign the HDD as a:
 - Read / write (R/W) drive for an existing group
 - Redundancy drive for an existing group
 - Read-only drive

12.3.3 Change from Group Mode recording to Partition Mode

To change from Group Mode recording to Partition Mode recording:

1. Open the Storage Mode menu.

Partition Mode select box

Recording Sche. Mode Partition + Group Capture Scheade Record on _ 2 - Storage Device P Cam. D1 -D2 D3 D4 D5 D6 D7 D6 P Cam. D1 -D2 D3 D4 D5 D6 D7 D6	4 D6 D8 D7 D8 12 D13 D14 D15 D16
Storage Device P Cam. D1 - D2 D3 D4 D6 D8 D7 D8 D10 D11 D12 D13 D14 D15 D18 D1	4 D5 D6 D7 D8 12 D19 D14 D16 D18
Charage Mode	
S) Advanced	
III Holday	

- 2. Click the **Partition** Mode select box.
- 3. Click **Apply**, and follow the prompt to reboot your system.

SECTION 13 RAID Arrays (RAID capable recorders only)

13.1 Creating a RAID array

RAID (redundant array of independent disks) is a storage technology that combines multiple disk drive components into a single logical unit. A RAID array stores data over multiple hard disk drives to provide enough redundancy so that data can be recovered if one disk fails. The NVR supports RAID types 0, 1, 5, 6 and 10. When a RAID array is created, all data on the HDDs is lost, and the system must be restarted. RAID is featured on some multi-HDD recorders.

The NVR provides two ways for creating the virtual disk, including one-touch configuration, for creating a RAID 5 array, and manual configuration, where you can select a different RAID level and specify the HDD configuration.

- The NVR supports creating at most 8 virtual disks.
- At least 2 HDDs must be installed for RAID 0.
- At least 2 HDDs must be installed for RAID 1.
- At least 3 HDDs must be installed for RAID 5. If you install 4 HDDs or above for one-touch configuration, a hot spare disk will be set as default.
- NOTE
- At least 4 HDDs must be installed for RAID 6.
- 4 / 6 / 8 HDDs must be installed for RAID 10.
- By default, one-touch configuration creates one array and one virtual disk. If the capacity of the array created by one-touch configuration is larger than 16TB, two arrays and two virtual disks will be created.
- By default, one-touch configuration adopts "foreground" initialization (recommended) to initialize the virtual disk. By using foreground initialization, the virtual disk can be used only after the initialization is complete.

When or after creating the RAID array, you can designate an additional HDD to be a **Hot Spare** drive. If an HDD in the array fails (array Degraded), the Hot Spare is used to automatically rebuild the array with the Hot Spare HDD replacing the failed drive in the array, and with data that was on the failed HDD written to Hot Spare the from the functional drives in the array. The size of the Hot Spare drive must be equal to or larger than the largest capacity drive in the array.

1. With a system without a RAID array, or with HDDs installed in the chassis that are not configured for RAID,open the **Menu Storage RAID Physical Disk** display. Verify that the drives you want to configure for RAID have "Functional" Status.

			Sto	rage				
	Recording Sche	- One-tou	ch C Create					
œ,	Capture Schedule	TNO:	Capacity Array	1 Type	Status Exectional	Model 618000/x001.2	1 Hot Sp	101
л.	Storage Device	э	6689.03GB	Normal	Functional	ST6000V%001-2	11	N
		5	5589.03GB	Normal	Functional	ST6000VX801-2		14
88	RAID	7	7452.04GB	Normal	Functional	ST8000VX0022-2	107	14
	Physical Desk							
	Array							
	Firmware							

2. Click the Advanced tab, check the box to **Enable RAID**, and then click **Apply**.

101			Storage	0 ± 4
	Recording Sche	Overwrite	K	
6	Capture Schedule	eSATA Usage	eSATA1 - Record/Capture -	
л,	Storage Device	Enable HOD Sleeping	2	
	Storage Mode	Enable RAID	q	
۲	Advanced	One one enterprote-coasts PLOC		
曲	Holiday	Enable Send HDD Information	2	
		Apply		

3. In the **Confirm** pop-up window, click **YES** to reboot the system.



4. After the NVR reboots, open the **Menu | Storage | RAID | Physical Disk** display again.

			Ste	orage				
	Recording Sche	- One-tour	ch C 😂 Create					
2		140	Capacity Array	Туре	Status	Model	Hot Sp.	1.1
-	Capture Scheoue							
12.	Storage Device	з	6689.0308	Normal	Functional	ISTE000VX001-2		N
		5	5589.03GB	Normal	Functional	ST6000VX001-2		N
88	RAID	7	7452.04GB	Normal	Functional	ST8000VX0022-2	107	N
	Physical Desk							
	Array							
	Firmware							

5. Click the **Create** button.

				Stor	age						
	Recording Siche	+ One-touch C 😂 Create Array	Create						-	Hot Sp	
e E e	Itorage Device	Array Name RAID Level	RAD	5				÷	1-2 1-2 1-2	11	N N
P A	Mysical Disk	Initialization Type Physical Disk	Initial	ize (Fast) 3	5	7		1	22-2		N
F (3) 5 (4) A	irmware itorage Mode kdvanced	Array Capacity (Estima	ted): 0GB								
- m	toliday					ок	Cancel		_	_	

NOTE If you click **One-touch Config**, a RAID 5 array will be created.

- 6. In the pop-up window:
 - a. Enter an Array Name. In the example here, RAID array is named RAID5.
 - b. Open the RAID Level drop-down list, and then click the kind of RAID you want to create.

Create Array		Create Array		
Array Name	RADS	Array Name	RAD5	
RAID Level	RAID 6	RAID Level	RAD 5	
Initialization Type	RAD 0 RAD 1	Inibalization Type	inbalize (Fast)	
Physical Disk	RAD 5	Physical Disk	×1 ×3 ×5 7	
	RAID 6 RAID 10			
Array Capacity (Estima	ter() 008 OK Cancel	Array Capacity (Estima	oed): 18767045	Cancel

- c. Open the Initialization Type field and select one of the following:
 - Background: The background initialization can synchronize the disks, and detect and repair bad sectors. During
 the background initialization, the virtual disk is allowed to be used.
 - Foreground (recommended): During foreground initialization, the RAID is initialized totally and bad disk sectors s
 can be detected and repaired. The virtual disk can be used only after the initialization completes.
 - Fast: The fast initialization usually takes short time and only initializes part of the RAID. It cannot detect a bad sector.
- d. Check the boxes for the drives that will become part of the array. For RAID 5 configurations, a minimum of three HDDs are needed. In this example, drives 1, 3 and 5 were selected. Drive 7 will be designated later as the Hot Spare.
- e. Click **OK** to construct the RAID array. This process can take hours, depending on the size of the HDDs.
- f. To designate an unused HDD as a hot spare, find the HDD you want, then click the select box for it in the Hot Spare column. **NOTE** An additional HDD can be installed after the array is built, and then designated as the Hot Spare.

- 3				Sto	rage			\$ ±	с
-	Recording Sche	+ One-tout	th C Create						
1.22	121101010101010	140	Capacity	Array	Type	Status	1 Model	Hot Sp.	1 10
100	Capture Schedule	1	6589 0308	RADS	Array	Functional	ST6000VX001-2	1	78.
181	Storage Device	э	5589.03GE	RAIDS	Array	Functional	IST6000V2001+2	≥\ <u>=</u>	74
		5	5500.0308	RAIDS	Array	Functional	ST6000VX001-2		Nit
88	RAID	1						1.1	14
	Physical Disk								
	Array								
	Firmware								

Click to Select No. 7 as Hot Spare

g. Open the Menu | Storage | RAID | Array display to view the Task field (far right column). Hover the cursor over the task field for the array to see the progress of the array creation. Allow the RAID initialization to complete before continuing. See below.



When the array creation is finished, the Task field shows None.

1	8	Storage							ф ±	с
	Recording Sche									
6	Capture Schedule	Free Space 11177/11177G	1 Physical	Hot S.	Status Functional	RAID 6	Rebu	f Delete	F Task None	
л,	Storage Device									
BB.	RAD									
	Physical Disk									
	Array									
	Firmware									

Task status when RAID initialization is complete

13.2 Rebuilding a RAID array

The Status of an array can be any of the following:

- Functional: There is no disk loss in the array.
- **Degraded**: The number of lost disks has exceeded the limit. When the virtual disk is in Degraded status, you can restore it to Functional status by rebuilding the array.
- Offline: All other conditions. When the Status is neither Degraded nor Functional, it is considered Offline.

The Status of the array is shown in the **MENU** | Status | Raid | Array display.

-				Storage						
	Recording Sche Capture Schedule Storage Device RAID ~ Physical Disk	1	Name RAK05	Free Space	Physical.	THES. 1	9tatus Functional	FAD 5	T	Rebu
	Array Firmware									

Arrays are automatically rebuilt when the array status is Degraded and a Hot Spare HDD is installed in the system.

13.2.1 Installing a Hot Spare disk

To install a hot spare:

- 1. Select a disk with the same or larger capacity as the largest HDD in the RAID configuration. Install the HDD in the recorder (see the Quick Start Guide provided with your recorder).
- Insert the spare HDD into the chassis. In the example below, the spare HDD was installed in bay 4. The status of the HDD is shown on the MENU | Storage | RAID | Physical Disks display.

3				Sto	rage			4 ±	с
	Recording Sche	- One-touch	C 🖸 Create						
	Capture Schedule	1 to 1	Capacity 5569 0308	RAID5	Type Array	Functional	1 Model ST6000VX001-2	Hot Sp.	1 1
-11.	Storage Device	3	5589.03CB	RAIDS	Array	Functional	ST6000VX001-2		Nii Nii
BB	RAID	2 1	7452.04048		Palearental	Functional	IST8000VX00022-2	1	
-	Physical Disk								
	Array								
	Firmware								

Click to Select No. 7 as Hot Spare

NOTE

After installing a spare HDD in the chassis, it may need to be initialized before it can be used. Check the status of the disk in the display above to ensure it is functional.

For the HDD you installed, check the select box in the Hot Spare column. Click the select box in the Hot Spare column for the spare disk that was installed. The Array field will show the HDD as Global, and the Type field will show it as Hot Spare.

	8				Sto	rage				
	Recording Sche	One-to	uch C	2.3 Create						
~	Capture Schedule	1 140.	- 1	Capacity	MIN	Type 1	Status	Model	1 Hot Sp	1 1
		- 1								
л.	Storage Device	3		6589.03GB	RAIDS	Array	Functional	ST6000VX001-2		N
		5		5589.03048	RADS	Array	Functional	ST6000VX001-2		N
88	RAID	7		7452.0408	Global	Hot Sp	Functional	ST8000VX8022-2	×	24
	Physical Disk								3	
	Array									
	Firmware									

Physical disk configuration after a spare HDD is installed

4. To remove a Hot Spare HDD, click the " \times " icon in the Hot Spare column for it.

13.2.2 Array Rebuilding process

When the chassis is configured with a Hot Spare disk and the array is in **Degraded** status, the system will automatically rebuild the array using the Hot Spare disk. To prepare for automatic rebuilding of the array, the system was configured as shown below, with a Global Hot Spare disk installed in physical slot 7.

				Sto	rage				
-	Recording Sche	One-to-	sch C. S. Create						
-	Contact School in	1 10.	Capacity	Array	Type 1	Status	Model	1 Hot Sp.	1 1
	Captore Scheoue	4							
33,	Storage Device	3	6689.03GB	RAIDS	Array	Functional	ST6000VX001-2		N
		5	5589.03048	RADS	Array	Functional	ST6000VX001-2		N
88	RAID	7	7452.0408	Global	Hot Sp	Functional	ST8000VX0022-2	*	N
	Physical Disk								
	Array								
	Firmware								

When an array is being rebuilt, open the in the **MENU | Storage | Raid | Array** display. The **Status** field shows **Degraded**, and the **Task** field shows **Rebuild**.





Allow the rebuilding task to complete before powering off the system. Depending on the size of the HDDs, this process can last several hours.

SECTION 14 Remote Access

If your NVR is connected to a local network (LAN), you can access it from another computer on the LAN through Microsoft[®] Internet Explorer[®] (IE) (after installing the WebComponents plugin), Mozilla Firefox or Google Chrome browsers. IE must be configured to run in Administrator mode to use all features of the web interface.

When connecting to the NVR, you must enter a User Name and Password. Some user permissions disallow remote access and / or features of this access method.

You can view up to 4 camera video streams at one time.

14.1 Using IE to login to the NVR

14.1.1 Configure IE to run in Administrator mode

IE must be run in administrator mode ti access the NVR. You can configure IE to run in Windows 7 and Windows 10. The procedures are different.

Window 7: To run IE as an Administrator:

- 1. Find or create an IE icon on your computer desktop.
- 2. Hold down the shift key, and then right-click on the IE icon.



3. Click **Run as administrator** in the pop-up menu.

Window 10: To run IE as an Administrator:

- 1. Find IE in the start menu. Usually this is found in the Windows Accessories group.
- 2. Pin the entry to Start.



3. Right click on the Internet Explorer tile, and then select **More | Run as administrator**.

14.1.2 Login with IE

To access the NVR from a computer on the LAN:

1. Open the IE browser on your remote compute and enter the IP address of the NVR in the URL field. In the example below, the IP address of the NVR is 192.168.2.122. If this is the first time you log into an Alibi recorder with this version of firmware, the following screen will appear, requiring you to install a plugin. If not, go to step 3 below.

C () http://192.168.3.122/doc/page/login.asp	D-0	G Google	O Login ×	6 🛪 🖯
				-
The second second second				
alibi 💮 Alibi	Note			
- Ser	1			
	New version of pl	un-in is detected. Undate it?		
	THE REPORT OF P	officers of other states of the second states of th		
		OK Cancel		

2. If the screen above appears, click **OK**, close the browser, and follow the on-screen instructions to install the plugin. When the plugin is successfully installed, the following screen will open.



- 3. In the screen above, click **Finish**.
- 4. Reopen IE and then enter the IP address of the recorder in the URL field.

€ → C (@ Not second 182,188,018 morphopological		₩ \$ 0 1
	O ALIBI"	
	- Constant -	
	Logi	

5. In the Login screen shown above, enter your *admin* username and password (see above). A Live View window will open.

14.2 Using Firefox or Chrome to login to the NVR

To login to the NVR with either Mozilla Firefox or Google Chrome, open the browser and enter the IP address of the NVR in the URL field. When the Login screen opens, enter your **username** and **password** in the fields shown, and then click **Login**.

14.3 Live View screen

The Live View window initially appears in a multi-screen configuration with no live view images shown. The display lists only the cameras configured in the NVR. In this tab, you can change the viewing screen layout by clicking the multi-screen select button and selecting the icon for a 1 screen a 2 x 2 layout, or other layouts depending on how many channels the recorder supports.



Screen icons



NOTE

The NVR has the ability to create a **Transcoded stream** to help show live video in bandwidth constrained environments. You can configure a Transcoded stream option in the web client **Configuration** | **Video / Audio** menu. By default it is set to **Auto** negotiate the resolution, causing the NVR to determine if the network resources are large enough to show full resolution and frame rate video. If not, the NVR will auto adjust down both to ensure the stream is delivered OK.



* You can view up to 4 cameras (video streams) at any time.

Additional icons can appear on the toolbar depending on the capabilities of the camera.

For **PTZ controls**, refer to "5.1 PTZ Control Panel" on page 72.

To view video from a camera in the Live View screen:

- Click a viewing frame to select it. When selected, the frame is surrounded by a bright box.
- Double the view icon in the left frame for the camera you want to see.



 To expand the image to full frame, double click the image in the viewing frame. To return to normal viewing mode, press ESC (keyboard escape key).

SECTION 14: REMOTE ACCESS

Help

The Help button at the top of the window opens a context sensitive help screen. The screen shown below appears when selecting Help from the Playback menu.

ntroduction				
nirounounon .	The tive view page allows	you to view the real-time video, capture image	s, realize PTZ	control, seccal presens and configure
 Accessing Via Web Browser 	video parameters.			
 Installing the plug-in 	Descriptions of the Ico	ns on the Live View Page		
Live View	The functions of the button	is on the toolbar are shown in the following tab	ie:	
View Page Introduction	Button	Description	Button	Description
 PTZ 	5	Start All Live View.	6	Stop All Live View
Playback	të	Live view with the main stream.	ta	Live view with the sub stream.
 Playback 	tø	Live view with the transcoded stream.	Ð	Manually capture the picture.
Parameters	-6	Manually start all recording.	-	Manually stop all recording.
Configuration		Audio on and adjust the volume.	-	Mute
Local Configuration	14.4	Start Two-way Audio		Stop Two-way Audio
 System 	20 20	Channel1/Channel2/Channel3.	30	Channel1/Channel2/Channel3.
 Network 	Q	Enable Digital Zoom	Q	Disable Digital Zoom
- 1044018049				
• • • • • • • • • • • • • • • • • • • •				
 Image 				
 Event 				
 Storage 				
 VOX Configuration 				

14.4 Playback tab

Open the Playback screen by clicking the **Playback** tab in the screen header. The Playback screen allows you to review video recorded from one camera or several cameras concurrently. Also, video files can be downloaded to your local computer.





To playback recorded video:

- 1. Click the multi-screen mode button to select the number of viewing frames you need to display. You can select either a 1 or 2 x 2 frame pattern.
- If you selected a 2 x 2 frame pattern, click on a video frame, and then click the camera channel you want to play recorded video from. Repeat this method for other video frames in the playback window. In the example above, *the ALI-NP3013RH* camera was selected for a 1 channel playback.
- 3. In the right frame, click the date when the video you want to see was recorded. Marks on the calendar show when video was recorded (see below).



 Click the Stream Type drop down list and select the video stream you want to see, and then click the Search button. In the example above, October 16, 2018 and Main Stream was selected.

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- 5. At the bottom of the screen, drag the timeline left or right to align the time with the play head. The condition that caused video to be recorded is indicated by a colored band on the timeline. The color legend is shown at the lower right corner of the window.
- 6. Click the **Play** button to begin playing video.

To Download recorded video:

- 1. During playback, find the video clip you want to download. Note the date and time of the clip shown above the timeline.
- 2. Click the **Download** icon.

Jownio by File Downio	au by	Une						
Search Conditions	F	le List					± Downloa	ĸ
Camera		No.	File Name	Start Time	End Time	File Size		
[D1] ALI-NP3013RH •		-1	0000000056008001	2010-10-16 00:36:17	2018-10-16 00:36:51	14 MB		
an Tura		2	0000000056008101	2018-10-16 00:38:51	2018-10-16 00:39:09	8 MB		
All Type		3	0000000056008201	2018-10-16 00.39.41	2018-10-16 00:40:13	13 MB		
		4	0000000056008301	2018-10-16 00:40:17	2018-10-16 00:40:37	9 MB		
oream type Main Stream		5	0000000056008401	2018-10-16 00.40.50	2018-10-16 00:41 20	12 MB		
that Time	8	6	0000000056008501	2018-10-16 00:41:28	2018-10-16 00:41:46	7 MB		
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2018-10-16 23 59 59 📑		9	0000000055008801	2018-10-16 00:43:43	2018-10-16 00:44:19	14 MB		
		10	0000000056008901	2018-10-16 00.44.19	2018-10-16 00.44.34	5 MB		
Q Search		11	0000000056009001	2018-10-16 00:51:02	2018-10-16 00:51 22	8 MB		
		12	0000000056009101	2018-10-16 00:51:33	2018-10-16 00:51 58	10 MB		
					Total 1	70 items	< < 1/2 > >>	į

- By default, the parameters in the search column are set to the search parameters you selected in the Playback screen. Reset the search criteria for the Camera, File Type, Stream Type, Start Time and End Time as needed to display files from another camera or other days and times, and then click Search.
- In the search result list, check the box of the video segment(s) you want to download. You can use the Start Time and End Time fields to determine the specific file(s) you want to save.
- Click the Download button at the top of the window. Download status is shown in the Progress column. Downloaded files are saved in the location specified by your browser. Allow the download to complete before closing the browser.

Computer + Storage (F:) + Downlo	eds ≯		•	+y Search	Downloads	-	-
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w Network		🛓 0000000056008601.mp4	10/19/2018 9:50 AM	16,206 KB	VLC media file		
IN ELLENW-PC		🛓 1506731398100.mp4	9/29/2017 7:37 PM	791 KB	VLC media file		_
IN KEVIN-PC		above-the-fluffy-clouds-nature-hd-wallpaper-1920x	7/5/2014 9:22 PM	135 KB	JPEG image		
Control Panel	-	AdobeinDesign6_0_1.zip	9/25/2011 12:45 PM	4,679 KB	ZIP archive		
III Control Panel Items		AdobelnDesign6_0_2.zip	9/25/2011 12:46 PM	8,387 KB	ZIP archive		
Sector Appearance and Personalization	-	AdobelnDesign5_0_3.zip	9/25/2011 12:47 PM	22,894 KB	ZIP archive		
Clock, Language, and Region	13	AdobelnDesign6_0_4.zip	9/25/2011 12:47 PM	25,087 KE	ZIP archive		
S Ease of Access		AdobelnDesign6_0_5.zip	9/25/2011 12:48 PM	26,701 KB	ZIP archive		
Hardware and Sound	100	maria caracian		WEARE AND	100 1	_	
1052 as a 1 1 4 5 5 5		·				-	

14.5 Picture tab

Open the Picture screen by clicking **Picture** in the screen header. The Picture screen allows you to search for, review and download capture files. It functions very similar to the Playback Download screen.

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- By default, the parameters in the search column are set to Channel D1 and the current day. Reset the search criteria for the Camera, File Type (condition causing the capture), Start Time and End Time of the search as needed to display files from another camera, conditions or other days and times, and then click Search.
- In the search result list, check the box of the file(s) you want to download. You can use the Start Time and End Time fields to determine the specific file(s) you want.
- Click the Download button at the top of the window. Download status is shown in the Progress column. Downloaded files are saved in the location specified by your browser. Allow the download to complete before closing the browser.

14.6 Configuration tab

Open the Configuration screen by clicking the **Configuration** tab in the screen header. Configuration menus enable you to view the NVR configuration and make changes. The ability to make changes through these menus is determined by the permissions associated with your login credentials.

NVR options in the configuration menu are like those in the embedded NVR **Menu** system. For more information on how to use these options, refer to the NVR **Menu** descriptions in previous sections of this manual. Menus associated with a specific camera model are described in the user manual for the camera firmware. After making configuration changes, click **Save** to apply your changes.

The initial configuration menu that appears is the last menu opened during a remote login, or the **System | System Settings | Basic Information** menu.

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NOTE

The NVR has the ability to create a **Transcoded stream** to help show live video in bandwidth constrained environments. You can configure a Transcoded stream option in the web client Configuration | Video / Audio menu. By default it is set to **Auto** negotiate the resolution, meaning that the NVR will determine if the network resources are large enough to show full resolution and frame rate video. If not, the NVR will auto adjust down both to ensure the stream is delivered OK.

14.6.1 Log information

You can video system log information remotely. Open the Log screen by clicking Configuration | System | Maintenance | Log.

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E Sutern Settings	Cognate & Marr Major Type Blast Time	All Types 2010-10-1	Diagnose • 00 00 00	sing Type End Time	Al Types 2018-10-19 23 59 59	•	Search				
Bendy Canada Mangamat Canada Mangamat Canada Mangamat Canada Ca	Log Line Ros	Tre	Man Ture	Wour Type	Channel No. Local Remote Liter	Ram	Export on Hart P				
					Nothers (**)						

The NVR log report is created by specifying a search criteria using the options at the top of the window, and then clicking the **Search** button. The search criteria menu includes filters to search for Major and Minor type events, and specify the start and end time of the report. Log reports can be saved in either text or Excel formats by clicking the **Save Log** icon:

To search for log information:

- 1. Open the Major Type drop down list, and then select alarm group of the alarms you want to search for.
- 1. Open the **Minor Type** drop down list, and then select the specific alarm you want to search for.
- 2. Click the **Start Time** calendar icon, then select the beginning of the time period when you want to begin the log search.
- 3. Click the **End Time** calendar icon, then select the end of the time period when you want to begin the log search.
- Click the Search button. A list of alarms matching your search criteria will appear. Note that the search result will display at most 4000 log entries, distributed across 40 pages (100 entries / page).

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VEA	8 2018-10-18	0938.47 Exception	· IP Camera Disconnect	De			
					Tes Elleres 💠 🗄	191 1 1	

5. Click **Export** to save the search data in a text file (*Log.txt*). The file is downloaded to the download directory of your browser.

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E System	Email Platform Access	Network Service Other	Integration Protocol	
Network	Alarm Host IP			
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Advanced Settings	Multicast Address			
A ViteolAudo	Video Download Bandwidth	262144	Kops	
a image	🖌 Enable Virtual Host			
m per	Enable Flow Control			

14.7 Logout

Click the **Logout** button in the screen header to close the remote connection to the NVF.

APPENDIX A Glossary

Device: Represents the Network Video Recorder. A device can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other devices.

Dual Stream: Dual stream is a technology used to record high resolution video locally while transmitting a lower resolution stream over the network. The two streams are generated by the NVR, with the main stream having a maximum resolution of the camera and the sub-stream favoring zero-latency encoding.

HDD: Acronym for Hard Disk Drive. A storage medium which stores digitally encoded data on platters with magnetic surfaces.

DHCP: Dynamic Host Configuration Protocol (DHCP) is a network application protocol used by devices (DHCP clients) to obtain configuration information for operation in an Internet Protocol network.

HTTP: Hypertext Transfer Protocol. A protocol to transfer hypertext request and information between servers and browsers over a network

DDNS: Dynamic DNS is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a domain name server to change, in real time (ad-hoc) the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

NTP: Network Time Protocol. A protocol designed to synchronize the clocks of computers over a network.

NTSC: Acronym for National Television System Committee. NTSC is an analog television standard used in such countries as the United States and Japan. Each frame of an NTSC signal contains 525 scan lines at 60Hz.

NVR: Network Video Recorder. An NVR can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other NVRs.

PAL: Acronym for Phase Alternating Line. PAL is a video standard, similar to NTSC, that is used in broadcast televisions systems in large parts of the world. PAL signal contains 625 scan lines at 50Hz.

PPPoE: Stands for "Point-to-Point Protocol over Ethernet." PPPoE is a network configuration used for establishing a PPP connection over an Ethernet protocol.

PTZ: Pan, Tilt, Zoom. PTZ cameras are motor driven systems that allow the camera to pan left and right, tilt up and down and zoom in and out.

USB: Universal Serial Bus. USB is a plug-and-play serial bus standard to interface devices to a host computer.

APPENDIX B Long Distance (Extended) PoE Power

The NVR Extended PoE (Long Distance) feature supports camera connections to the internal Ethernet switch using cable lengths greater than 100 meters (328 ft). These feature requires:

- Ethernet cables can be Cat5E or Cat6 with solid copper conductors. CCA (Copper Clad Aluminum) conductors are not supported.
- The camera power consumption must be \leq 8 W
- The maximum bit rate (main stream and sub-stream) must be \leq 8 Mbps
- The camera and NVR combinations shown in the following table are supported for the maximum cable lengths indicated.

	NVR									
Camera	ALI-NVR3304P	ALI-NVR3308P	ALI-NVR5216P / Ali-NVR5232P							
ALI-NS2012VR										
ALI-NS2013VR										
ALI-NS2015VR(B)										
ALI-NS2018VR										
ALI-NS2022VR										
ALI-NS2023VR										
ALI-NS2025VR(B)	Maximum length: 200 m (656 ft)	Maximum length: 250 m (820 ft)	Maximum length: 250 m (820 ft)							
ALI-NS2028VR			,							
ALI-NS4012R										
ALI-NS4013R										
ALI-NS4015R										
ALI-NS4018R										
ALI-NS4022R										

replace table

APPENDIX C Troubleshooting

Problem: No image displayed on the monitor after normal startup

Possible Reasons

- No VGA or HDMI connections
- · Connecting cable is damaged
- Input mode of the monitor is incorrect

Troubleshooting steps

- 1. Verify the device is connected to a monitor through an HDMI or VGA cable. If not, connect the device with the monitor and reboot the recorder.
- 2. Ensure that the connecting cable is good. Change the cable and reboot the recorder.
- 3. Check the input mode of the monitor. It must match with the output mode of the recorder (e.g. if the output mode of recorder is HDMI output, then the input mode of monitor must be the HDMI input). If not, modify the input mode of monitor.

If the steps above do not resolve the problem, please contact your system support organization.

Problem: There is an audible warning sound "Di-Di-DiDi" after a new recorder starts up

Possible Reasons

- No HDD is installed in the device.
- The installed HDD has not been initialized.
- The installed HDD is not compatible with the device or is broken-down.

Troubleshooting steps

- 1. Verify that at least one HDD is installed in the recorder. If not, please install the compatible HDD. Refer to the Quick Start Guide for the HDD installation steps.
- Verify the HDD is initialized. Go to Menu | Storage | Storage Device. If the status of the HDD is "Uninitialized", check the select box for the HDD, and then click Init.
- Verify the HDD is detected or is in good condition. Go to Menu | Storage | Storage Device. If the HDD is not detected or the status is Abnormal, replace the dedicated HDD according to the requirement.

If the steps above do not resolve the problem, please contact your system support organization.

APPENDIX C: TROUBLESHOOTING

Problem: The status of an IP camera added to the system is *Disconnected* when it is connected through Private Protocol. Check the camera status at: Menu | Camera | IP Camera.

Possible Reasons

- Network failure, and the device and IP camera lost connections.
- The configured parameters are incorrect when adding the IP camera.
- · Insufficient bandwidth.

Troubleshooting steps

- 1. Verify the network is connected. To verify the network connection:
 - a. Connect the device and PC with the RS-232 cable.
 - Open the Super Terminal software, and execute the ping command. Input "ping IP" (e.g. ping 172.6.22.131).
 Simultaneously press Ctrl + c to stop the ping command.

If return information appears and the TTL number small (less than 20ms), the network is normal. If there is no Reply, make sure a network cable is connected, and cables are connected to your router.

- 2. Verify the configuration parameters are correct.
 - a. Go to Menu | Camera.
 - b. Verify the network parameters are the compatible with those of other devices on the network, including: IP address, protocol, management port, user name and password.
- 3. Verify the whether the bandwidth is enough.
 - a. Go to Menu | Maintenance | Net Detect | Network Stat.
 - b. Check the access bandwidth usage. Verify that it has not reached the limit.

If the steps above do not resolve the problem, please contact your system support organization.
Problem: The IP camera frequently goes offline and the status of it displays as Disconnected

Possible Reasons

- The IP camera and the device versions are not compatible.
- Unstable power supply of IP camera.
- Unstable network between IP camera and device.
- Limited flow by the switch connected with IP camera and device. Step 1 Verify the IP camera and the device versions are compatible.

Troubleshooting steps

- 1. Go to Menu | Camera, and view the firmware version of connected IP camera.
- Go to Menu | Maintenance | System Info | Device Info and view the firmware version of recorder. Verify that the firmware version of the camera is compatible with the recorder.
- 3. Verify power supply of IP camera is stable:
 - a. Verify the power indicator is normal.
 - b. When the IP camera is offline, execute a ping command from the PC to verify it can reach the IP camera.
- 4. Verify the network between IP camera and recorder is stable.
 - a. When the IP camera is offline, connect PC and device with the RS-232 cable.
 - b. Open the Super Terminal, use the ping command and keep sending large data packages to the connected IP camera, and check if there exists packet loss.
 - **NOTE** Simultaneously press **Ctrl** + **c** to exit the ping command

Example: Input ping 172.6.22.131 -l 1472 -f.

1. Verify the switch is not flow control.

Check the brand, model of the switch connecting IP camera and device, and contact with the manufacturer of the switch to check if it has the function of flow control. If so, please turn it down.

If the steps above do not resolve the problem, please contact your system support organization.

APPENDIX C: TROUBLESHOOTING

Problem: Live view stuck when video output locally.

Possible Reasons

- Poor network between device and IP camera, and there exists packet loss during the transmission.
- The frame rate has not reached the real-time frame rate.

Troubleshooting steps

- 1. Verify the network between device and IP camera is connected.
 - When image is stuck, connect the RS-232 ports on PC and the rear panel of device with the RS-232 cable.
 - Open the Super Terminal, and execute the command of "ping 192.168.0.0 I 1472 f" (the IP address may change according to the real condition). Check for packet loss.

NOTE Simultaneously press **Ctrl + C** to exit the ping command

 Verify the frame rate is real-time frame rate. Go to Menu | Camera | Encoding Parameters. Set the Frame rate to Full Frame.

If the steps above do not resolve the problem, please contact your system support organization.

Problem: No record file found in the device local HDD, with the message "No record file found".

Possible Reasons

- The time setting of system is incorrect.
- The search condition is incorrect.
- The HDD is error or not detected.

Troubleshooting steps

- 1. Verify the system time setting is correct. Go to Menu | System | General, and verify the "Device Time" is correct.
- 2. Verify the search condition is correct. Go to playback interface, and verify the channel and time are correct.
- Verify the HDD status is normal. Go to Menu | Storage | Storage Device to view the HDD status, and verify the HDD is detected and can be read and written normally.

If the steps above do not resolve the problem, please contact your system support organization.

Problem: Live view stuck when video output remotely via the Internet Explorer or platform software.

Possible Reasons

- Poor network between device and IP camera, and there exists packet loss during the transmission.
- Poor network between device and PC, and there exists packet loss during the transmission.
- The performances of hardware are not good enough, including CPU, memory, etc.. Step 4 Verify the network between device and IP camera is connected.

Troubleshooting steps

- 1. When image is stuck, connect the RS-232 ports on PC and the rear panel of device with the RS-232 cable.
- 2. Open the Super Terminal, and execute the command of "ping 192.168.0.0 I 1472 f" (the IP address may change according to the real condition), and check if there exists packet loss.

NOTE Simultaneously press **Ctrl + C** to exit the ping command

- 3. Verify the network between device and PC is connected.
 - a. Use the keyboard shortcut *windows+r* to open the Command (**cmd**) window.
 - b. Use the ping command to send large packet to the device, execute the command of "ping 192.168.0.0 –/ 1472 –f" (the IP address may change according to the real condition), and check if there exists packet loss.

NOTE Simultaneously press **Ctrl + C** to exit the ping command

 Verify the hardware of the PC is good enough. Simultaneously press Ctrl+Alt+Delete to enter the windows task management interface, and then click the Performance tab (see below).



If the resource is insufficient, stop unnecessary processes.

If the steps above do not resolve the problem, please contact your system support organization.

APPENDIX C: TROUBLESHOOTING

Problem: When using the device to get the live view audio, there is no sound, there is too much noise, or the volume is too low.

Possible Reasons

- Cable between the pickup and IP camera is not connected well; impedance mismatches or incompatible.
- The stream type is not set as "Video & Audio".
- The encoding standard is not supported by the device.

Troubleshooting steps

 Check the cable between the microphone and the IP camera. Make certain the cable is connected properly, the impedance matches, and the equipment is compatible.

Log in the IP camera directly, and turn the audio on, check if the sound is normal. If not, please contact the manufacturer of the IP camera.

- 2. Verify the setting parameters are correct. Go to Menu | Camera | Encoding Parameters, and set the Stream Type to Audio & Video.
- 3. Verify the audio encoding standard of the IP camera is supported by the device.

The device supports G722.1 and G711 standards, and if the encoding parameter of the input audio is not one of the previous two standards, you can log in the IP camera to configure it to the supported standard.

If the steps above do not resolve the problem, please contact your system support organization.

Problem: The image gets stuck when device is playing back by single or multi-channel.

Possible Reasons

- Poor network between device and IP camera, and there exists packet loss during the transmission.
- The frame rate is not the real-time frame rate.
- The device supports up to 16-channel synchronize playback at the resolution of 4CIF, if you want a 16-channel synchronize
 playback at the resolution of 720p, the frame extracting may occur, which leads to a slight stuck.

Troubleshooting steps

- 1. Verify the network between device and IP camera is connected.
 - a. When image is stuck, connect the RS-232 ports on PC and the rear panel of device with the RS-232 cable.
 - b. Use the keyboard shortcut *windows+r* to open the Command (**cmd**) window.
 - c. Open the Super Terminal, and execute the command of "*ping 192.168.0.0 l 1472 f*" (the IP address may change according to the real condition), and check if there exists packet loss.

NOTE Simultaneously press **Ctrl + C** to exit the ping command

- 2. Verify the frame rate is real-time frame rate. Select Menu | Record | Parameters | Record, and set the Frame Rate to Full Frame.
- Verify the hardware can afford the playback. Reduce the channel number of playback. Go to Menu | Camera | Encoding Parameters, and set the resolution and bitrate to a lower levels.
- 4. Reduce the number of local playback channel. Go to Menu | Playback, and uncheck the select box of unnecessary channels.

If the steps above do not resolve the problem, please contact your system support organization.
