

LILIN Aida Camera User Manual

Chapter 1.0 Introduction	2
Chapter 1.1 Trademark	2
Chapter 2.0 Before Using This Aida Plug-in	3
Chapter 2.1 Upgrade Aida Plug-in	4
Chapter 2.2 Aida Plug-in Licensing	5
Chapter 3.0 How to Purchase an Aida Plug-in	5
Chapter 3.1 How to Get a Trial License	5
Chapter 3.2 The Following Situations Where Aida Plug-in Might not Work	6
Chapter 3.3 Who Needs this Aida Plug-ins	6
Chapter 4.0 How to use the Aida Camera	6
Chapter 4.1 The Camera Installation for Aida Traffic Management	6
Chapter 5.0 How to use Aida Plug-in	7
Chapter 5.1 HTTP Post of Aida Software	7
Chapter 5.2 The Outputs of Aida Camera	8
Chapter 5.3 Verify the Output Triggering of Aida Camera	9
Chapter 6.0 Aida Alarm & Object Classification	9
Chapter 6.1 The Settings of Aida Alarm Detection	9
Chapter 6.1.1 Prohibit Zones	10
Chapter 6.1.2 Adjust Prohibit Zones	10
Chapter 6.1.3 PX Indicators	10
Chapter 6.1.4 Prohibit Zone Detection for Human	.11
Chapter 6.1.5 Tripwire Detection	12
Chapter 6.1.6 Density and Counter Detections	13
Chapter 6.1.7 All Objects Detection (AND)	14
Chapter 6.1.8 Lack of Any Object Detection (NAND)	14
Chapter 7.0 SmartEvent	14
Chapter 7.1 SmartEvent and Condition	14
Chapter 8.0 LILIN Navigator & Aida Integration	16
Chapter 8.1 Installation of LILIN Navigator Software and License Activation	16
Chapter 8.2 Global Timer	17
Chapter 8.3 Set as Default	17
Chapter 8.4 Behavior Detection Setting of Aida Software	17
Chapter 8.4.1 Navigator and Aida Behavior Detection Settings	18
Chapter 9.0 iOS and Android Apps	20
Chapter 9.1 Camera Setup for Al Behaviors	21
Chapter 9.2 Al Behaviors Push Notifications	21
Chapter 9.3 Cold Zone	22
Chapter 9.4 LILIN Event Cloud	23
Chapter 10.0 NVR/DVR Integration	23
Chapter 10.1 AI Object / Behavior Recognition Setting	23
Chapter 10.1.1 AI Event Setting	23
Chapter 10.1.2 Al Camera Setting	24
Chapter 10.1.3 Alarm Setting	25
Chapter 10.1.4 EVent Search	26
Chapter 10.1.5 Event Playback	27
Chapter 11.0 The Integration SDK of Aida Plug-in	28
All Is De Generation Des Transit	00



Chapter 1.0 Introduction

LILIN P6/Z6 Aida cameras can install Aida plug-in for running number plate recognition system and object recognition system. The camera uses the latest deep learning technology for edge computing. Deep learning technology is introduced by the concept where the machine is told to learn what to look for, the plates, the digits, and the objects. It works out the most descriptive and obvious features for the plate, the digit or the object. In other words, deep learning is told to discover the underlying patterns in classes of images that can give much better result than traditional computer vision.

LILIN P6/Z6 Aida cameras can perform recognition features and work independently for triggering (1) HTTP Post notifies other network devices, (2) digital outputs of the camera, and (3) LILIN Navigator Corporate system. LILIN P6/Z6 Aida cameras are able to run deep learning plug-in for different recognition tasks.

Features

- Support up to 4K recognition and 6 FPF for number plate recognition and 9 FPS for object recognition.
- Recognize up to 6 car plates within a camera.
- Support group denial list, allowed list and exclusion list setting.
- License plate character size and license plate character length can be set.
- Support for license plate JPEG snapshots.
- Support LILIN IO Box interfacing external devices for gate control.
- Support database synchronization for denial list and allowed list.
- Support HTTP SDK integration.
- Support LILIN Navigator Corporate.



Chapter 1.1 Trademark

This product contains H.265 (High Efficiency Video Coding, HEVC) codec technologies and is manufactured under the license from Access Advance LLC, and the HEVCAdvance symbol are trademarks of Access Advance LLC.



Covered by one or more claims of the HEVC patents listed at patentlist.accessadvance.com.



Chapter 2.0 Before Using This Aida Plug-in

Please, read LILIN P6 and Z6 IP camera user manual before operating LILIN camera. This user manual only focuses on the Aida plug-in features of the camera.

After installing Aida plug-in for the camera, click on the About page. If the Aida camera is not licensed, email System ID to LILIN sales person for trial or purchasing purposes. After purchasing, the Unlocking Key will be sent to you. Please copy-and-paste the Unlocking Key into About dialog for using Aida plug-in features.

Use the LILIN IPScan tool for scanning the camera via the network. You can also use the default IP address at 192.168.0.200 for accessing the camera.

	lavigator IPE cap 64 bi	te								_		\sim
Help	Navigator in Scall 04 Di	15										$^{\sim}$
neip												
#	Name 27R0482X0-P	IP Address 192,168.3.57	Subnet Mask 255-255-255-0	Gateway 102.168.112.254	Port 80	Assignm Static IP	MAC Address 000ffc938511	Model 658	Name IP Address Subnet Mask Gateway HTTP Port No. Static OHH PPPoE Account PPPoE Password Authentication Username Decompod	Z7R6482X3 192.168.3. 255.255.25 192.168.11 80	+-P 57 5.0 2.254	DNVIF
									Passworu			
									Stop scanning		Apply	
Stat	tus:	IP As Versi	signment: Static on: 10.1.001.2424						Firmware Update	Batch	IP Setti	ing
1									Set as Default	Tim	ne Adjus	,t
											SDDP	
									Other		ОК	

For accessing the camera for the first time, make sure that create a username and password for security purpose.

9LILIN	,
IPCAM	
오 Username	
Password 💿	
Login	

Minimum Password Strength Requirements:

1. The password length must be 8 or more characters.

2. The password must include at least 1 number ($0 \sim 9$), 1 uppercase letter, 1 lowercase letter and 1 symbol(~? / + = , :; .' @ # \cong % ^ & * () _ -).

Note: Please preserve the credential for accessing the camera properly. Forgetting the credential for accessing the camera, please perform hardware factory default.



Chapter 2.1 Upgrade Aida Plug-in

Please click "Maintenance -> Firmware Update", the Aida plug-in file format of this product is "plugincv22s66.bin", select the "Browse" button to select the file, and select the "Submit" button to install the plug-in.

9LILIN					Live Langu	age Log Out
System	Video	Controls	Network	SmartEvent	Notification	Maintenance
Firmware Update	Setup > Mainte Please do not tu update firmware and may be req flashcv22s66.bi blugincv22s66.bi	enance > Firmwa im off power and v correctly due to n uired to ship back n: Application Firm in: Dun-in package 瀏覽 Upi lie Export Network Settil	are Update wait until this web page etwork communication to your vendor for repa ware Submit oad 0% ng	shows up automatically issue may damage this r.	Fail to machine	
	Import Config Fi	System Settin Controls Setti Event Setting Services Settin Video Setting Auto Focus S	ig III IIII IIII IIIIIIIIIIIIIIIIIIIIII	Upgrade		
	Reboot System	Reboot Syste	m			
	Default Settings Initialize with Initialize All \$ 	out Network Settir Settings	ngs & System Setting &	Auto Focus Setting		

After the Aida plug-in gets installed, the Aida plug-in page can see the relevant information of the plug-in as in LILIN Plug-in Package (LPKG) page.



Click on the plug-in icon that can open the plug-in page. LILIN Aida software is at 8592 port. Click delete button in that can remove the plug-in.





Chapter 2.2 Aida Plug-in Licensing

If your camera does not have a pre-purchased license key, you can purchase the license key after purchasing the camera. After receiving the unlocking key from the sales representative, click "About" button to enter the "unlocking key " to enable the Aida identification function.

JPR LPR	LPR LIST	ÌÚ ALARM	ольол	کوبکی SETTING	? About	
Ab	out AidaEngine -				Datatse Softwar System Unlocki	atset version [2.0.0.24 tern ID [0-0F-FC-65-51-23 pocking key ?pyb50?veFmG=5p10?jD46@e043t Rjt&RbuestLadoCLIED09v5Jke
					License License	Inse fype Traffic, ANPR AI (Talwan), Inse status (Licensed (25 days left)
					License	VOLO LICENSE Version 2, July 29 2016 THIS SOFTWARE LICENSE IS PROVINCE VALL CASES SO THAT YOU RECH II IS SUPER
						Set

Chapter 3.0 How to Purchase an Aida Plug-in Chapter 3.1 How to Get a Trial License

To get a trial license, visit <u>https://www.ddnsipcam.com</u> for registering an account. Once an account gets registered, click on 30-Days Free Trial. You will get a trial license. Follow previous step for enter the trial license.

	Language: <mark>English 🔹</mark> MENU 🚍 -
User : stevehub@meritlilin.com.tw (Merit ULIN)	Purchase AI Engine Purchase NAV Upgrade AI/NAV License Manage DDNS Account
Feature:	AI ANPR High Speed AI Number Plate Recognition
	 Up to 1080P at 48 FPS recognition speed Up to 8 cameras recognition recommended Up to 200 km/h or 125 mph freeway solution HTTP SDK available for integration Can be used with LILIN Navigator video management software
	Object Recognition Engine



You are able to manage the license keys for Aida Plug-in or Navigator below:

f. ID/Description	e State e	Detail ¢	Time	e Version	e Channels	e ONVIF Channels	Unlocking Key
6425 Enter for Site Name	A		2019-06-29 10:21	Al Engine (ANPR GBR 2ch)			VirZyaXUBWJQieov7VWTi9qBMftss96fPOKZ6XUEfGN n0uffrIGdQ+GD1INSGL/iwWtp8zgHns19IMJVd4+cFT LDoAB+pggqPUQzwGA=
6424 Enter for Site Name	AI		2019-06-28 11:08	Al Engine (ANPR TWN 2ch)			TbHiutSYtWjkBXXblxWLTwKboRn0Dj8LEUglXndmXt8 wv0ENwVQfYy8GlqQXldHssYR9tYomBwD7qdwu7OG Xt2bbBhYnLQqVV8tQ54bo=
6253 Enter for Site Name	A		2019-04-25 10:10	AI Engine (Free Trial / ANPR TWN)			TbHiutSYtWJk8XXblxWLT0yieAftCo6oMAx+L2UbGQc DNmHe6P48Q8kAAm0YJ2dGJK2u8Cq4lqNg67tSxbEi ==
6174 Enter for Site Name	×		2019-04-02 16:53	AI Engine (ANPR TWN)			TbHiutSYtWjkBXXblxWLTyejkaLfb59IREO93MeeZhjFE +IIzCoBySCbAexY2UMDpLAWxd8Lq6pyocZxEcv+A=
6171 Enter for Site Name	×		2019-04-02 15:42	AI Engine (ANPR TWN)			Mw+bzwKhggfYPdshhJOqCCejkaLfb59IREO93MeeZF E++llzCoBySCbAexY2UMDpLAWxd8Lq6pyocZxEcv+/ =
6051 aloup	С		2019-02-13 13:53	NAV Corporate (Free Trial)	16 + 4	0	3C1B60A6ECA0BBTKKCUUB35F615BFCG1DB6BXXVX

Chapter 3.2 The Following Situations Where Aida Plug-in Might not Work

- In rainy day, the rain drops block the field of view of the detected number plates or objects.
- In foggy environment, the fog blocks the detected number plates or objects.
- The reflection caused by sunshine and mirror
- The large object blocks the license plates.
- Blurry video in a strong wind installation

Chapter 3.3 Who Needs this Aida Plug-ins

The following customers are suitable for using LILIN Aida Plug-ins

- System integrators for car park automation
- Software developers for building automation
- Traffic management system developers
- Home automation integrator
- Developers of VMS companies
- Number plate recognition system installers of LILIN NAV

Chapter 4.0 How to use the Aida Camera

Chapter 4.1 The Camera Installation for Aida Traffic Management

The installation of the camera is important. For cost consideration, installing the camera on a single pole is preferred. For this reason, please make sure that the camera field of view can cover the entire intersection, and the resolution for object identification must be 120 pixels wide x 120 pixels high.

One pole installation is preferred.







Chapter 5.0 How to use Aida Plug-in Chapter 5.1 HTTP Post of Aida Software HTTP Post can notify other systems for integration purpose. See examples below:



Click on **t** to launch HTTP notification dialogue box. There are few pre-programmed HTTP CGI commands for interfacing LILIN NVR or IP camera. Click on Add, Delete, and Edit buttons for editing the HTTP Post commands.

For example, to control IP camera's relay output, follow the steps below:

- **Protocol**: Select HTTP port (default) for communication purpose.
- **Method**: Select the target device HTTP protocol method.
- Event name: Specify an event name.
- **Username and password**: Enter the username and password of the target device.
- HTTP Port: The port number of the target device.
- URL: The CGI command of the IP camera for reply triggering output.
- Customized HTTP header
- **Post content**: Customized contents of AI recognition result including "counter", bonding boxes, number plate, and others.

LPR		À ALARM	SETTING	? ABOUT	
Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca C	utput Settings — nable HTTP notification Events mera virtual aaaaa mera virtual aaaaa mera virtual 3 mera virtual 3 mera virtual 4 D panel display n virgator HTTP me Box HTTP alarm of R HTTP alarm of Create Sma	nessage la output utput		Advanced Protocol HTTP O HTTPS Method GET O POST Event name Icambot Host IP Ibcahost Host pot Imilipatform-data Vamente Customized POST content POST content	
				Set	



Г

Chapter 5.2 The Outputs of Aida Camera

When Aida plug-in detects an object in detection zone alarm or a license plate recognition black and white list, it can perform camera alarm notification, (1) camera-side smart event alarm notification (2) HTTP notification to other systems and (3) counter output.

Create SmartEvent" Click the button to automatically create the camera "SmartEvent" alarm output setting. This button can create 4 camera events and correspond to the Camera virtual inputs #1 ~ #4 of the Aida notification event (see the picture below). If Aida plug-in has the AI detection, e alarm output, you can use the camera to trigger the "smart event", select the behavior to be detected and press the output setting button; you can specify the output after behavior detection as

SmartEvent otion Detection pering Detection udio Detection	Step - Smalt/wet >
<u>се</u>	Contion Numer Add Triggering 4
	Alarm Settings
	Classification Detection zone output person Camera virtual 1 Camera virtual 2 Camera virtual 2 Camera virtual 3 Camera virtual 4 Detection zone virtual 4 Detection zone virtual 4 Detection zone (person) Detecti
	Set alp for object classification bject size (FOV%) is to filter out the size of objects over the range. onfidence (%) is to filter out objects with less recognition confidence. abavior detection is to detect the behavior of at racking object. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after behavior detections. election output is the output actions after b

9LILIN.

Chapter 5.3 Verify the Output Triggering of Aida Camera

Go to Setup > System > System Log of the camera to verify the triggering by Aida detection.

System Vi	deo	Controls	Networ	rk SmartEvent Notification Maintenance
General	Setup > Syster	m > System	Log	
User		_		
Timer		e 1 of 15	비 ▷ 러 ^	Type: ALL 💙 🖹 Displaying 1 to 25 of 3764 items
	IP Address	User	Date & Time	Log Description
USD			2021/07/20 22:40:03	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
System Log	127.0.0.1	hello	2021/07/20 22:40:03	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:40:03	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:40:03	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:40:03	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:40:02	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:40:02	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:40:02	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:40:02	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:40:02	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:22	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:22	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:21	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:21	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:21	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:21	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:21	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:21	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:21	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:21	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:07	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:07	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:07	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)
	127.0.0.1	hello	2021/07/20 22:39:07	Set #1 Virtual Input Value(1)(SYSTEM MESSAGE)
			2021/07/20 22:39:07	#1 event(Aida Event 2),#1 condition triggered(EVENT TRIGGERED)

Chapter 6.0 Aida Alarm & Object Classification

For Aida alarm and object classification, follow the instruction below:



Chapter 6.1 The Settings of Aida Alarm Detection

Click on Enable object classification detection for using AI object detections. For object behaviors, the behavior is defined in a detection zone. There are four detection zones programmable for classified objects. Follow the instructions below for setup.

Alarm Settings Alarm Settings Enable object classification Object sets Contidence(%) >	Action detection Prohibit zone (07A) Zone with dwall (Parking violation (01A) PR dwale list access (06A) PR dwale list access (06A) Trun left (01A) Turn left (01A)
4 Classification © person © bicycle © car ■ motobike □ aeroplane □ bus Utain	Detection zone output Camera virtual 1 Camera virtual 2 Camera virtual 3 Camera virtual 3 Camera virtual 3 Camera virtual 4 Detection zone • . All
truck boat	CO DOX FT IP agital aiarm output COV R HTTP dgital aiarm output Show classified object only Show classified object only
	Set
Help for object classification Object size (FOV%) is to filter out the size of Confidence (%) is to filter out objects with is Behavior detection is to detect the behavior Detection output is the output actions after Detection zones. There are four zones for the other zones on the	f objects over the range. ss recognition confidence. of a tracking object. the defection.

Note: It is important to disable "Enable object classification" feature, if object detection is not used.



Chapter 6.1.1 Prohibit Zones

Click on ±L buttons for inserting or deleting a detection zone. Once a detection zone gets added, drag the Anchor of the zone to fit the environment. There are up to four detection zones for detecting the behaviors of classified objects.



Chapter 6.1.2 Adjust Prohibit Zones

To adjust the detection zone, please use mouse to drag the blue point of a detection zone according to the sense.

Show classified object only 1 If the OSD screen display of the classified object is displayed, please click "Show classified object only". If you do not want to see the object name and recognition rate, please click 1.

Chapter 6.1.3 PX Indicators

As shown below, the PX indicators can be used for measure the pixel sizes in width and height of a number plate, when a user using a mouse drags the blue point of the zone. The minimum for a object or a plate to be recognized is about 120 pixels in width. The PX indicator resolution is based on the resolution of the camera.





Chapter 6.1.4 Prohibit Zone Detection for Human

To set up an alarm notification for an object entered the prohibited detection zone, please select in the object names in "classification". Add a detection zone to desired area. Tick on "Prohibit zone detection". Click "Set" button to save the settings.

This can be used for detecting a person entering a prohibit zone or parking violation.

The prohibit zone works as below: If an object gets classified and enters the prohibit zone as below, the classified objects in the zone get shown in red.



To setup prohibit zone:

- 1. Enable the zone for parking area
- 2. Check the detection objects such as car, truck, SUV, etc
- 3. Set the dwell for detection zone with dwell

	олтыт.	SETTING ABOUT	
Alarm Settings	80	Action delection Prohibit zone (01AI) Done with dwell / Parking violation (01A) PR alovel list access (06AI) PR denial list access (06AI) Tripwire / Traffic flow (01AI) Turn right (01AI) Detection zone output Camera virtual 1 Camera virtual 2 Camera virtual 3 Camera virtual 4 LED panel display message Navgator HTTP dddd IO Box HTTP ddgtal alarm output NVR HTTP digital alarm output	Curr, Style, 10-460 Curr, Style, 10-460 Curr, Style, 10-460 Curr, Style, 10-360 Curr, Style, 10-3
Help for object classification Object size (FOV%) is to filter out Confidence (%) is to filter out obje Behavior detection is to detect the Detection output is the output actin Detection zones. There are four zo	the size of object cts with less reco behavior of a tra ons after behavio ones for the deter	ts over the range. sgnition confidence. scking object. r defections. ction.	Sut



The following situations are supported for AI detection:



Chapter 6.1.5 Tripwire Detection

Each zone can be configured as directional tripwire mode. There are total 4 zones that can be converted to tripwire modes. The tripwire works as below: A person needs to cross the tripwire based on the flow.



To setup tripwire

- 1. Enable the zone for parking area
- 2. Check the detection objects such as car, truck, SUV, etc
- 3. Select tripwire for detection

LPR LPR LIST ALARM		SETTING ABOUT
Alarm Settings	80	Action detection Prohibit zone (01Ai) Cone with dwell / Parking violation (01Ai) Chr denia is access (06Ai) Trunk right (01Ai) Curn right (01Ai) Curn right (01Ai) Curn right (01Ai)
Classification Cperson carson car caroplane train train truck boat	*	Detection zone output Camera virtual 1 Camera virtual 2 Camera virtual 4 DED panel display message Nawigater HTTP digital alarm output IO Box HTTP digital alarm output Detection zone • II Detection Zone • II Enable direction Show classified object only I



Chapter 6.1.6 Density and Counter Detections

The density detection (crowd detection) and counter are supported. Density detection is to count the classified objects in a detection zone. This function can be used for the detection of too many people in the detection area and trigger the camera alarm. To use this function, please select the "Density detection" feature below.

Counter triggering >	Counter Counter2 V Operand +1 V Reset value a Reset every 1 minute V Link to post event LED panel display message V Post every 5 minutes V	Counter01: 50, Counter02: 0, Counter03: 0, Counter04: 0, Counter05: 0, Counter06: 0, Counter07: 0, Counter08: 0,
----------------------	---	---

Action detection	
Prohibit zone	
Zone with dwell / Parking violation	\cap
LPR allowed list detection within zone (06AI)	
LPR denial list detection within zone (06AI)	
Tripwire / Traffic flow	
Density detection (03AI)	
Missing object detection	
	\sim

Please set the counter and set the operand to "=". This feature is to detect and to count the classified objects in the detection zone. If the counter is greater than the trigger counter, it will start to trigger the alarm.

Counter	Counter03 🗸	Operand	= 🗸	
Counter t	riggering >			
1				

The counter will display the detected counting in the panel after it reaches "Counter Triggering" setting.

Counter01: 50, Counter02: 0, Counter03: 0, Counter04: 0, Counter05: 0, Counter06: 0, Counter07: 0, Counter08: 0,

The counter detection is to count the behavior detection. Once it reaches the value of the Counter Trigger, the camera can trigger an action. The example below shows the tripwire with "Counter Triggering" feature at counter #2. The operand is set to "+1" for every triggering. For the counting feature, please follow:

- Enable one of the behavior for a detection zone
- Set operant to "+1/-1".
- Reset value: Reset to the default value
- Reset every minute: Reset time interval
- Link to post event: List the counting result via HTTP Post
- Post every: HTTP post time interval

Counter Settings		
Counter triggering >	Counter Counter02 Operand +1 Reset value 0 Reset every 1 minute Link to post event [LED panel display message Post every 5 minutes	Counter01: 50, Counter02: 0, Counter03: 0, Counter04: 0, Counter05: 0, Counter06: 0, Counter07: 0, Counter08: 0,



Chapter 6.1.7 All Objects Detection (AND)

When there are one or several engines for AI detection, you can enable the **AII objects detection AND** algorithm. For example, one application could be used for detecting (1) goggles, (2) safety helmets, and (3) safety vests at a preprogrammed detection zone during the dwell. If all the 3 objects exist at the same time, it enables the access control for automation purpose.

- Alarm Settings							
Enable object classificat Al object size (FOV%) Sonfidence (%) >	ion 0	Behavior del Density d Al missing LPR visito zone (06Al) Unattend Tamperin Al object Lack of a	ection etection (03AI) g object detectio or list detection i ed or missing of g detection g detection (ANI ny object detect	on in oject D) ion			
Lassification no_helmet(face) helmet safety_vest	*	(NAND) Detection zo Camera v Camera v Camera v Camera v NVR HTT output Navigator output	ne output irtual 1 irtual 2 irtual 3 irtual 4 P digital alarm HTTP metadat	a	etection zone + - Clean Set	All 1	Cold zone Show
	•	Light up t	he 13th IO Box		Show classified of		Enable object detection

Chapter 6.1.8 Lack of Any Object Detection (NAND)

When there are one or several engines for Al object detection, you can enable the **Lack of Any Al Object Detection**. For example, one application can be used for detecting (1) goggles (2) safety helmets, and (3) safety vests. If the three objects does not exist at the same time at pre-programmed detection zone during the dwell, the digital DO output can be triggered to enable alarm notification.

Chapter 7.0 SmartEvent

Chapter 7.1 SmartEvent and Condition

There are a total of 5 events available for Smart Events. The events and events operate independently. If multiple events are required to operate independently, the event can be activated to trigger the alarm output.

System	Video	Controls	Network	SmartEvent	Notification	Maintenanc
SmartEvent	Setup > Smarth	Event > SmartEv	ent			
Motion Detection	Event List					
Tampering Detection	+ Add × Ci	ear 🕜 Edit				
Audio Detection	Item		Ev	ent Name		
	- 01	Aida Event 1				
	Enable Even Event Name Condition N	t:0 :Aida Event 1 ame1:Aida Triggeri	ng 1			
	- 02	Aida Event 2				
	Enable Ever Event Name Condition N	it:0 :Aida Event 2 ame1:Aida Triggeri	ng 2			
	- 03	Aida Event 3				
	Enable Even Event Name Condition N	it:0 :Aida Event 3 ime1:Aida Triggeri	ng 3			
	- 04	Aida Event 4				
	Enable Ever Event Name Condition N	it:0 :Aida Event 4 ime1:Aida Triggeri	ng 4			

9LILIN.

The "conditions" of the SmartEvent is dependent, and the action of the Condition #2 will be executed after the Condition #1 is finished, and the next conditions can be triggered after the condition #2 is finished.

System	Video	Controls	Netwo	rk	SmartEvent	Notification	Maintenand
SmartEvent	Setup > S	<pre>^ martEvent > Sma</pre>	artEvent				
Motion Detection							
Campering Detection	Enable Eve	ent 1					
Audia Datastian	Event Nam	e Aida I	Event 1				
Audio Delection							
	Conditio	n 1 Condition 2	Condition 3	Condition 4	Condition 5		
	Condition	n Name Aid	la Triggering 1				
		Cabadula	Lotion				
	ingge	Schedule #	Action				
	Detect	ion Time 1	Sec. Sleep Tin	ne 0 ∨ S	ec.		
	(Curror	t number/Maximum	n number of Trigge	r Dulo io 2/2			
	(Currer		In number of Trigge	r Rule is 2/3)		
	Trigger	Virtual In	put 🗸				
	Enable	Trigger	Operator	Value	Duration		
	~	Virtual Input #1	- ~	1	0 ∨ Sec.		
		Virtual Input #2	=	1 or 0	0 ∨ Sec.		
		Virtual Input #3	=	1 or 0	0 V Sec.		
		Virtual Input #5	-	1 or 0	0 V Sec.		
		Virtual Input #5		1 or 0	0 V Sec.		
		Virtual Input #7	- *	1 or 0	0 V Sec.		
		Virtual Input #8		1 or 0	0 V Sec		
		Virtual Input #9	= ×	1 or 0	0 V Sec		
		Virtual Input #10	= ¥	1 or 0	0 × Sec		
		Virtual Input #11	= ~	1 or 0	0 V Sec.		
		Virtual Input #12	= ~	1 or 0	0 V Sec.		
		Virtual Input #13	= ~	1 or 0	0 V Sec.		
		Virtual Input #14	= ~	1 or 0	0 V Sec.		
		Virtual Input #15	= ~	1 or 0	0 V Sec.		

Click "Schedule", enter the week schedule and enter the start and end time of the event.

System	Video Co	ontrols Net	work SmartEv	ent Notification	Maintenance
SmartEvent Motion Detection	Setup > SmartEver	nt > SmartEvent			
Tampering Detection Audio Detection	Event Name	Aida Event 1			
	Condition 1 Condition Name	Aida Triggering 1	Condition 4 Condition	on 5	
	Trigger	dule Action			
	Enable Holitay II Select Sch 9 All 5 Su 5 Su 5 Su 5 Su 5 Su 5 Su 5 Su 5 Su	Ust Image: Start Time V 0 V 0 V N 0 V 0 V 0 V N 0 V	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		



To set the alarm output to be "executed", please click "alarm output" to trigger the DO alarm to open the door.

System Vide Centrols Network SmartEvent Montenance System Vide Centrols Network SmartEvent Montenance SmartEvent SemartEvent SemartEvent SemartEvent SemartEvent SemartEvent SemartEvent Montenance Montenance Spatem Under SemartEvent SemartEvent SemartEvent SemartEvent SemartEvent Montenance Montenance Spatem Ontenance Spatem Under SemartEvent Montenance Spatem Montenance SemartEvent Montenance Montenance SemartEvent Montenance </th
Control Name Math Topology 1 Control Name Math Topology 1 Control Name Math Mathematical States Control Name Math Mathematical States States Name of Action Rale is 1/10) PTP Service, Rile Name of Control Name Math Topology 1 Mathematical Name Name of Control Name Mathematical Name Name Name Name Name Name Name Name

Chapter 8.0 LILIN Navigator & Aida Integration

Before installing software, please prepare the following software and hardware tools:

- (1) LILIN Navigator software must be version 2.0.0.194 or above.
- (2) LILIN Navigator software license key.
- (3) LILIN license plate recognition software ANPR installation package.
- (4) LILIN Aida license plate recognition license key.

After setting up Navigator AI number plate recognition, Navigator will launch GYNet.exe for recognition. If there is an issue, make sure that GYNet.exe gets launched and GYNet.exe is at HTTP 8592 port.

By launching AIPlug-in, the GYNet.exe is also launched for LILIN Navigator VMS via HTTP port 8592.

Click on Navigator software and click camera properties button. Click on ANPR Group setting. Type 8592 port for interfacing LILIN GYNet.exe.

Chapter 8.1 Installation of LILIN Navigator Software and License Activation

Please refer to the user manual of LILIN Navigator and follow the installations steps in sequence. After installation, click on the "?" icon in the upper right corner of Navigator to check the status of the license. Click on register icon to register the license plate recognition software license. Please provide your information including e-mail address, and system ID, and pass this information back to your dealer or sales person who will provide you the license key for full functionality.





-	
Mail Address:	NAV
Unlocking Key:	AC8 :WWWW
System ID:	1E 2
Status:	Version: Navigator Corporate Feature: ANPR, Failover, Tagging, RAID, Sync Storage, Alarm Management,
	Third-party: ONVIF/MJPEG license: 34 Record license: 22/17
01.110	7F BCA
GUID:	11 30A
Get Unlocking K	ey Register Cancel

Chapter 8.2 Global Timer

Support IP camera DO to trigger an automatic global timer, set the start time for starting up the countdown to trigger DO alarm.

Chapter 8.3 Set as Default

For restoring license plate advanced setting to default settings, set as default.

Chapter 8.4 Behavior Detection Setting of Aida Software

For Aida behavior detection and Navigator settings, please set the relevant detection area in Aida Plug-in first, as follows:

UPR LIPR LIST ALARM		SETTING ABOUT	
Alarm Settings Enable object classification Object size(FOV%) 6 6 Confidence(%) > 8 2 Dwell > 4 Classification © person © bicycle © car	80	Action detection Prohibit zone (01Ai) Lona with dwell / Parking violation ((LPR demail list access (06Ai)) Turni list access (06Ai) Turn list (01Ai) Durn list (01Ai) Detection zone output Camera virtual 1 Camera virtual 2	01AI) car, 69% (D. 460 car, 64%, 10 461 car, 98% (D. 306
motorbike aeroplane bus train truck boat	•	Camera virtual 3 Camera virtual 4 LED panel display message Navigator HTTPdddd IO Box HTTP digital alarm output NVR HTTP digital alarm output	Detection zone + - All Prable direction Show classified object only
Help for object classification Object size (FOV%) is to filter out the Confidence (%) is to filter out object Behavior detection is to detect the L Detection output is the output action Detection zones: There are four zon	e size of object s with less reco ehavior of a tra is after behavior les for the dete	ts over the range, opnition confidence, acking object or detections, ction,	Set



Chapter 8.4.1 Navigator and Aida Behavior Detection Settings

Click "Camera Properties" and click "Alarm Management" to configure Aida's behavior detection.

• LILIN						?	uх
	Camera Settings#004 Display/Record Activate this device Name	Cam 004 zzz	Preview	Cam 004 zzz 20/10/01 11:47:51	Cam 004 zzz	2020/ 11.47 C DIS CPU REC 0 MIC C MUTE admir	10/01 50 SK FULL 41% OFF DFF
Call Control of the second sec	Channel Location	2222				RUA	10530-10
A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWNE	De de Tes	NAME OF THE OWNER		and the second sec	L	1111	
Stabler And	Device Type	NAV USB/P2P Live Stri V Detec			and a state of the	.0	-
	Channel	Cam 001 Setting				5	-10
		Auto import DVR Impor					OFF
	Streaming Mode Sing	le Streaming Mode	- Construction	A True		ON	OIT
		to obcarring mooo	Concession of the local distance of the loca			1.	opplications
	Record Mode Reco	ord the main stream 1 FPS	and the second se			电	Groupines
	Network					-	
	IP/DNS	127.0.0.1					Windows
State - The state of the	HTTP Port (ex. 80)	80	Find Device	Video			Playback
and the second se	Onvif Port (Optional)	80	Assign the Recording Disk				1
The second s	HTTPS Port (ex. 443)	443	Assign the recording blac	-			
	Video Port	16900	Auto switch the audio	Alarm Management		٢	0
and the second second second	Username	admin	ONVIF	ePOS/OSD		57	
P. Charles States Market State	Password	••••	Device Type: IP Cam			ις.	
The state of the state of the state of the	Camera/485 ID	1	Alarm Input (DI): 0	ANPR Group Setting	VER	SEQ	â.
	P2P ID	FILE E:\New folder\rightturn.mp4	Relay Output (DO):	Object Counting	162211 Cust		101
Address of the second second				Facial Recognition	lozz IJ, Guest		
	Synchronize Time with	PC Apply		r seisi rraceginterr			
	Low bit rate client serv	er connection 0.05 FPS	1	Set the privacy mask			
					A 🦉 -		
MKF265 MZN1897 A					MZN5582		
Guest Guest G	D. N. H. D. M.	1			Guest 11:47:41		
#005 Cam 005 #004 Cam 004 #0	Report Device	Ladinch Browser		Cancer	004 #004 Cam 004		
111		222 222	222	222 222	222		

Click "Options" in "Alarm Input Management" to set Aida's behavior detection.

Alarm Management Cam#004			×
Condition#1 Condition#2 Condi Alarm Input Management NAV CGI Triggering Video Loss Detection Speed Measurement Detection ANPR Detection Facial Recognition	tion#3 Condition#4 Others Alarm Output (DO) Play Sound Send E-mail PTZ Presel Recall Signal Digital Output Alarm Full Screen	0001 02 03 04 05 06 07 08 09 1 Sunday Monday Tuesday Vednesday	0 11 12 13 14 15 16 17 18 19 20 21 22 23
QRCode detection ✓ Aida Behavior Detection ✓ Options	Post-alarm Record Pre-alarm Recording Control of the second of the secon	Thursday Friday Saturday	Apply All Schedule
Enable Alarm Input (DI) AND Logic Alarm Notification Detection Dwell (Sec) Use the Not Logic	Pre-alarm Dwell (Sec) 1 ~ Alarm Output Dwell (Sec) 5 ~ The Next Alarm Output Dwell Disat (Min)	Close	
Apply Cameras			OK Cancel

To set up the Aida host, please click on the "Aida Server" option to set up the communication between Navigator and Aida. The Aida server has two important options:

- (1) Send the image to the Aida server for detection.
- (2) Get recognition result from the video of the Aida server.

Send the image to the Aida server for identification—Navigator sends the video to the Aida server to display the recognition result

Get the recognition result from the video of the Aida server—Navigator will display the recognition after receiving from the Aida server, and the Aida server will actively connect to the IP camera.



Alarm Management Cam#002		× Aida Behavior Detection		×
Condition#1 Condition#2 Condition#3 Condition#4 Others Alarm Input Management Alarm Output (DO) NAV CGI Triggering Video Loss Detection ANPR Detection GRCode detection Video Loss Detection QAIda Behavior Detection Video Loss Detection QAIda Behavior Detection Video Loss Detection V	0001102030405060706091011121314151617181920212223 Sunday Monday Tuesday Vednesda Thursday Friday Saurday	2031/03/23 00/05/33 7 Ore 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		flagen of sterret Over Over Over
Options Options	Enable Apply All Schedule	Al Engine 20 v	Traffic Behaviors	Object Detection
Enable Alarm Input (DI) Pre-alarm Dwell (Sec) AND Logic Alarm Notification Aiarm Output Dwell (Sec) S Detection Dwell (Sec) The Next Alarm Output Dwell Disat (Min) Use the Not Logic Apply Cameras Alarm setting from remote device	Close • OK Cancel	seried Gordinates	Zone on A Pochos pholine Traffic Row Traffic Row Train Ry Train Ry Train Ry Train Ry Violation Train Ry Violation Usam Woldow Usam Woldow Usam Woldow Rom Re en Olybe	No mark weeting darm Max weeting alarm Not proper mark weeting alarm No brievet Helmet darm Not proper helmet weaking alarm Person Person
Approvemental Presidence demo	Cancer	NCC Counter Aida Server		OK Cancel

Aida Server	>	<						
Enable service								
Enable watch dog service								
○ Send images to the Aida server for detections								
• Get detections from the video in Aida server								
Server IP	192 . 168 . 3 . 57	l						
Web Port	8592							
Linked Channel	1 ~							
	OK Cancel							

After above settings, Navigator can receive the Aida behavior detection and number plate recognition shown below:





Click "Options" in "Alarm Input Management" to configure Aida's behavior detection.



Navigator Control Center can also receive and display the behavior and number plate recognition via Aida Plugin.



Chapter 9.0 iOS and Android Apps

LILINHome apps are able to push the snapshots, once a behavior gets triggered. The snapshot of an AI behavior can be sent to LILIN Event Cloud and retrieved by LILINHome apps.



Chapter 9.1 Camera Setup for AI Behaviors

After the camera gets setup for its IP address, port number, username and password, a user can setup AI detection zone for IP camera. There are four detection zones available for setup.



Chapter 9.2 AI Behaviors Push Notifications

The snapshots are stored in LILIN Event Cloud at <u>https://event.ddnsipcam.com</u>. To enable the service, click on "Enable cloud notification" option. Provide username and password of LILIN Event Cloud. LILIN AI camera will push the snapshots to LILIN Event Cloud.

Notification dwell: The sending interval in between the detection.

General Language Pot # English Figure 1 SS2 Event Cloud Enable cloud notification Account Password Notification dwell (secs) Notification dwell (secs) Cloud statue Apply Cloud statue Apply Defeat Defeat		? ABOUT
Event Cloud Enable cloud notification Account StaveNub@mertilin com twi Password	General	Language [English V] Pont # [8592
Account Very and Account Ac	Event Cloud	Apply Enable cloud notification
Ayydy Dofault		Account stevehul@martilin.com.tv Q Password Notification dwell (secs) 30 Cloud statue
		Apply Default



Chapter 9.3 Cold Zone

The camera can support "Cold Zone" reporting for false alarm. For example, the picture below, the rock is recognized as a person. Training the AI to adapt to the environment is a time-consuming task. The Cold Zone technology can suppress the recognition rate of the misclassified stationary object.

To set the cold zone, follow the steps below:

- (1) Click Set button.
- (2) Click on the bounding box of the misclassified object.
- (3) Click show to see the cold zone object for five second.(4) There are up to 8 cold zones can be set.
- (5) To clear all cold zones, click on Clear button.



LILIN Event Cloud will push event notification to your mobile phone, after it got the snapshots from LILIN AI camera. If the notification is a false alarm, you can click the false alarm button feedback to LILIN camera for reducing the recognition rate.





Chapter 9.4 LILIN Event Cloud

LILIN Event Cloud offers Dashboard and Event Alert to the users who can conveniently analyze the events statistics and get the event images.



Note: For free service, there are only 512 pictures for storing the snapshots.

Chapter 10.0 NVR/DVR Integration Chapter 10.1 AI Object / Behavior Recognition Setting Chapter 10.1.1 AI Event Setting

- Click on META DATA > General > AI camera (06AI) channel.
- Serial Input: Select Channel.
- METADATA Service: Select On.
- Emulated Mode: Select AI.
- Event: Click according to requirement, person, car, motorbike, truck, bus, emergency vehicles, tripwire zone, other.
- After completing the setting, click on "Apply".

9LILINI 2	GENERAL	🗟 EVENT 🔥				ADMIN 🌞 😫
🖾 camera 3.	1. CAM01	Serial Input	Channel	Event		
QO RECORD		Metadata Service	On 🚽	Person	⊡Car	Motorbike
M ALARM		Serial Device Server	192.168.127.254	⊡Truck	∎Bus	Emergency Vehicles
		Server Data Port	950	Tripwire Zone	⊡Other	
L DISPLAT		Server Command Port	966			
သို့ NETWORK		Emulated Mode	Al			
ද⊖ွ́} system		Encoding Mode	ASCII			
ି ଲି PTZ		Baud Rate	9600 🔶			
		Data Size				
		Parity	None +			
E OTHER		Stop Bit				
		Flow Control	None			
		OSD Font Color	FFFFF			
					7. Apply	Undo



Chapter 10.1.2 AI Camera Setting

On the live screen of the local NVR, right-click on the AI camera channel and click "Launch camera page" to enter the AI-related camera settings. (For detailed settings, please refer to the AI camera manual).





Chapter 10.1.3 Alarm Setting

- General Setting: Click on Alarm > General > Al camera (06Al) channel.
- Metadata Popup: Select On.

9LILINI 2.	GENERAL	MOTION AREA (•) OUTPUT				admin 🌣 🗱
☐ CAMERA 3. 1. ^{QD} RECORD ∭ ALARM	1. CAM01 2. CAM02 3. CAM03 4. CAM04	Alarm Input Type Off - Motion Enable Off - Motion Sensitivity Standard - Save Event Snarchot On		Motion Popup Specify Alarm Text Display View Display Type	Off v Off v Camera	5 v (5 ~ 100 Seconds) (Max. length 32)
C DISPLAY		Apply To All Channels		Display Content		
င့်္ဘဲ system				Alarm Popup Specify Alarm Text	Off ~	5 (5 ~ 100 Seconds)
META DATA				Display View Display Type		
E OTHER				Display Content		
			4.	Metadata Popup Specify Alarm Text	On v	5 (5 ~ 100 Seconds) (Max. length 32)
				Display View Display Type		
Version: 11.0.26.7266				Display Content	5. Apply	Undo

- Alarm Setting: Click on Alarm Setting > Output > Select according to required output type. Example: DO#1:
- Enable: Select On.
- Trigger Conditions: After clicking the channel event, click according to requirement, person, car, motorbike, truck, bus, emergency vehicles, tripwire zone, other.

9LILIN 3	C GENERAL	T MOTION AREA . CUTPUT 2.	ADMIN	*	*
CAMERA	ALARM LED	Enable On 4.			
QO RECORD	BUZZER	Manual DO Control Off -			
ற்ற் alarm	E-MAIL	Trigger Conditions 5, Channel Events System Events Schedule			
DISPLAY	FTP NOTIFICATION	Alarm Time 5 * (5-100 Seconds)			
ထို့ NETWORK	DO#1				
🌣 DO#1 - Channel Eve	ents	*			
1. CAM01 2. CAM02 3. CAM03 4. CAM04	 Motion Alarm Motion Alarm Motion Alarm Motion Alarm 	Video Loss Person Car Motorbike Truck Bus Emergency Vehicles Tripwire Zone Other Video Loss Video Loss Video Loss			
Select/Clear All		7, Apply Cancel			
		8. Apply	Undo		



Chapter 10.1.4 Event Search

On the local NVR, click on the AI icon to enter the AI event search screen.



The default search time of the system will start at 00:00:00 of the current day, and end at the time user enter the search screen. To change the search time, click on the time on the lower left and adjust the search time. Due to limited system resources, the system can only provide screenshots of the most recent 4,000 events. The latest events will be listed on the first tab, and each tab will display up to 20 events. To switch the event page, click on the left and right arrow icons, or click the channel number and event icons as the search filter conditions.

To display all events list, click on the "Alarm Event" button. To return to AI event, please click on the AI icon.

2021	/09/	<u>-11-</u>	5 1d 2	7:50			Front door					
			All				Event Period 2021/09/01	10:42 - 2021/09/11 10:56				
							Search Period 2021/09/11					
			oda	y			X .01 X .02 X .03	.04				ALL
		Ye	ster	day			All 🖇 👼	(s (l = 1=	أَخُ ۖ إَنْ 🚥 🚓	f Others		
		Thi	s We	eek			2021/09/11 10:49:28	2031/09/11 10 47:49	2021/06/11 10.45-52	2021/09/11 10.45.26		10:44.19
							.01 CAM01 Al Car	.01 CAM01 AI Car	.01 CAM01 AI Car	.01 CAM01 AI Car	.01 CAM01 Al Car	10.44.15
		Las	t We	eek								
		Cont	mbar	2021							1.0	
-		Jepu	aniber,	2021			2021/09/11 10:39:39 .01 CAM01	2021/09/11 10:15:16 .01 CAM01	2021/09/11 10:15:01 .01 CAM01	2021/09/11 10:14:38 .01 CAM01	B 2021/09/11 .01 CAM01	10:14:05
SUN	MON	TUE	WED	тно	FRI	SAT	Al Car	Al Car	LPR Visitor 215D13 0205013 2	05DLBR Visitor 2105013	205D13 2150 LPR02050030	2105013 0205013
29						4						
5						-11	2021/09/11 10:14:03	2021/09/11 10:14:02	2021/09/11 10:13:58	2021/09/11 10:13:57	7 2021/09/11	10:13:55
							.01 CAM01 LPR Visitor 215013 205033 0	.01 CAM01 2105 LPR Visitor s132050 2	.01 CAM01 L5013 2050:LPR Visitor 225012	.01 CAM01 LPR Visitor 205D13 2	.01 CAM01 225012 LPR Visitor 2	205G13 205D13
26								- Carl		100	- e -	
3							2021/09/11 10:13:27 .01 CAM01 LPR Visitor 02015013 02050	2021/09/11 10:13:26 .01 CAM01 13 LPR Visitor 2105013 0	2021/09/11 10:13:23 .01 CAM01 2015013 02:15991 9/isitor 215D13 0215013	2021/09/11 10:12:56 .01 CAM01 LPR Visitor 2015D13	5 2021/09/11 .01 CAM01 205D13 2150 LB R Visitor	10:12:48
	0 Ho	▲ ▼ surs	0 Minutes	- Sei	0			-20 / 64 (Maximum 4000)		_	۲	⊳ \$
										· · · · · · · · · · · · · · · · · · ·	Alarm Event	Cancel



4		Septe	ember,	2021			Event Period	2021/09/01 10:42	- 2021/09/11 10:49							
SUN	MON	TUE	WED	тни	FRI	SAT										
29							Search Period									
5						•11	X .01 X.0	2 🔀.03 🔀.0								ALL
12						18	.Motion .IVS Exited	Sensor	X.Manual X.IVS Vehicle	🔀 .Metadata 🔀 .Temp. & Face	C.LPR Blacklist	🔀 LPR Whitelist 🔀 Al Person	🔀 .LPR Visitor 🔀 .AI Car	IVS Entere	d ke	
19							Al Truck	Al Bus	XI.AI Emer. Vehicle	es 🔀 Al Tripwire Zone	X Al Other				X -	ALL
26									2021/09/11 10:48:38	.01 CAM01		,	Al Car			
3									2021/09/11 10:47:49	.01 CAM01			Al Car			
	10 Ho	- ⇒ ours	0 Minutes	Sei	0 conds	2			2021/09/11 10:46:53	.01 CAM01		2	Al Car			
•		Septe	ember,	2021												
SUN	MON	TUE	WED	тни	FRI	SAT			2021/09/11 10:45:29	.01 CAM01		,	Al Car			
29																
5						•11			2021/09/11 10:44:19	.01 CAM01		,	Al Car			
12							100		2021/09/11 10:39:39	01 CAM01			Al Car			
19							10-2									
26							1200		2021/09/11 10:15:16	.01 CAM01		,	Al Car			
3							200									
	10 Ho	↓ ↓ purs	49 Minutes	÷ Sei	0			* • 1-7 / 64	(Maximum 4000)					AI	\triangleright	÷,
													Search		Cancel	

Event Sea	arch Filter Conditions		
S.	Person	(AA-000)	License Plate
	Car	Ŕ	Sensor
5 ⁶ 5	Motorbike	ر میں ا	Detection Zone
đ.	Truck	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Tripwire
	Bus	Others	Other
Ő	Emergency Vehicles		

Chapter 10.1.5 Event Playback

To playback the event, please double-click on the AI event or alarm event. Or single click on the event and then click the "Play" button.







Chapter 11.0 The Integration SDK of Aida Plug-in

There are <u>SDK</u> available for interfacing LILIN Aida Plug-in via 8592 HTTP port. Basically, third party software is able to get (1) behaviors, (2) object names from the cameras port 8592. Visit LILIN AI SDK for more details.



Aida Performance Requirement

Edge Al	Recognitions / Ch / Sec
License plate recognition (LPR), 2 AI weights	6 recognitions / Sec
LPR + Objects, 3 AI weights	5 recognitions / Sec
Objects, 1 AI weight	8 recognitions / Sec