



User Guide

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# **1** Introduction

3xLOGIC's VIGIL ANPR (Automatic Number Plate Recognition) Utility is an easy-to-use traffic enforcement solution featuring full integration with 3xLOGIC's cutting-edge VIGIL VMS software. VIGIL ANPR offers your clients, customers and employees another layer of protection in traditionally low-security environments such as parking lots, garages, and toll roads.

Coupled with the added benefit of the VIGIL VMS's ease-of-use, scalability and high-resolution footage management capabilities, the VIGIL ANPR's ability to capture and record license plates provides VIGIL with a new layer of functionality; yet another multi-point solution added to the VIGIL surveillance family.

This user guide is current as of VIGIL ANPR v11.60.0000

### **1.1 Features**

A brief summary of features is listed below:

- VIGIL Integration The VIGIL ANPR Utility features full integration with the VIGIL family of surveillance products and can be utilized in conjunction with VIGIL Client or other VIGIL mobile products for any number of field applications and environments.
- License Plate Hot Lists Compile lists of known license plates numbers. When a number on the list is encountered, the utility can be configured to trigger an alarm or relay in Server. This feature can be used to quickly identify stolen vehicles or known high-risk offenders, or to automatically permit access (using DIOs in conjunction with VIGIL Server) to gated communities, parking garages, etc.
- Auto List Import Automatically import license plate hot lists from a custom destination (csv or txt format).
- Import/Export Utility Settings, License Plate Hot Lists Import and Export of Utility Settings and License Plate Hot List is fully supported. Import settings to a new instance of the ANPR Utility
- **Export XML data to Custom External Destination** Plate data can be exported to a custom destination for review or archiving separate of the VIGIL Server database.
- Built-in Search Functionality via VIGIL Server Integration The VIGIL ANPR Utility features search functionality for recorded data via integration with VIGIL Server. Quickly search and locate plates of interest.
- **Multiple VIGIL Server Support** Capture plate data from several cameras across multiple VIGIL Servers.
- ANPR Camera Support The utility has the ability to interface with certain ANPR cameras that capture and process plates on-board, greatly reducing CPU usage on your VIGIL ANPR system. Plate data is then passed along to the utility and inserted into the database.

# **2 VIGIL ANPR Utility**

# **2.1 Installation**

After acquiring the install file for the VIGIL ANPR Utility:

- 1. Run the file to begin the installation process.
- 2. Follow the on-screen instructions to complete the installations process.
- 3. After the install is complete, navigate to Start> All Programs> VIGIL and select VIGIL ANPR to run the utilit

### 2.2 Main Interface

After opening the VIGIL ANPR Utility, you will be presented with the VIGIL ANPR Utility main screen window(pictured below.)

😝 VIGIL ANPR - 3xlogi	C Inc.								– 🗆 ×
Hide Sidebar Settings	Live Alarm	Q Search 1	x1 2X2 3X3	4 X 4 Stop All	U Suspend All Thu	umbnails About	1		
- 🐨 Cameras									
ANPR Cam Thumbnail	•				3				
Snapshot	ANPR Camera	Overview Camera	Time Stamp	Plate Number	Camera No	Server IP	Door No	Direction	External Alarm No
		6							
중i UnRegistered: 30 trial days re	i maining 📆 O came	i era(s) in use					i 114/20	15	12:06:24 PM

Figure 2-1: VIGIL ANPR Utility - Main Screen

- 1. **Icon Menu Toolbar** From the icon menu toolbar, a user may hide/show the camera list *Sidebar*, access the VIGIL ANPR Utility *Settings*, access the *Alarms* window, access the plate *Search* function, adjust live view layouts, open the thumbnail browser, Stop/Start/Suspend live view controls and access the *About* window.
- 2. **Camera List** This section is a list of cameras that have been configured in the VIGIL ANPR Utility. Add Cameras in *Settings>Camera Settings*. The list can be opened and closed by clicking the *Hide/Show Sidebar* button.
- 3. Live Viewer A live view of cameras currently configured in the VIGIL ANPR Utility. Live view layout may be changed by selecting a different pre-configured layout from the icon menu toolbar.
- 4. **ANPR Camera Thumbnail Preview** A thumbnail preview image of the latest number plate to be recorder by the selected VIGIL ANPR Utility will be displayed in this area.
- 5. **ANPR Event List** If any plate numbers have been captured, each individual plate will be listed here with supporting information. This list holds a maximum of 50 entries.
- 6. Information Bar Information regarding the ANPR utility will be listed here. Information includes Registration Info, Number of Cameras in use, Date and Time.

### **3** Settings

VIGIL ANPR Utility has several settings which can be customized to best suit the environment in which it is being deployed.

-

Click the Settings button to open the Settings window. The License Plate Settings will be the active tab by default.

### 3.1 License Plate Settings

Pictured below is the License Plate Settings tab.

🔅 Settings		×
License Plate Settings	Select Countries and Weights: Parameters: Minimum Number of License Characters: Maximum Number of License Characters:	Canada V Not Assigned V Not Assigned V
ş 6	4 Min Confidence of Single Plate Character: Min Confidence of All Plate Character: 5 Stream Speed:	0.7
	Import/Export Settings 7 Import License Plate Settings Ex	port License Plate Settings

Figure 3-1: VIGIL ANPR Utility - Settings - License Plate Settings Tab

- Select Country and Weights Select applicable countries and configure their individual weights. Each Country has different number plate styles and dimensions. Selecting the proper countries will greatly improve ANPR accuracy. A countries weight value is the expected percentage of encountered plates that will belong to the corresponding country . 0.7 would set the expectancy rate(how many visible number plates are expected to be from the chosen country) to 70%. The default value is 0.7. 3xLOGIC recommends using the default value.
- Minimum Number of License Characters Sets the minimum amount of numbers that should appear on number plates in this particular application of the ANPR Utility. Plates with less than the defined value will not be recorded.
- 3. **Maximum Number of License Characters** Sets the maximum total amount of numbers that should appear on number plates in this particular application of the ANPR Utility. Plates with more than the defined value will not be recorded.
- 4. **Min Confidence of Single Plate Character** Sets the *Minimum Confidence Value for Single Plate Character* value. With higher confidence values, plate reporting will be less frequent, but with a much higher chance of accuracy. Lower confidence will boost the amount of recorded plates, but the inaccuracy will also increase. This confidence setting presides over single characters on a recorded plate.
- 5. **Min Confidence of All Plate Character** Sets the *Minimum Confidence Value for All Plate Characters* value. With higher confidence values, plate reporting will be less frequent, but with a much higher chance of accuracy. Lower confidence will boost the amount of recorded plates, but the inaccuracy will also increase. This confidence setting presides over entire number plates.
- 6. Import/Export License Plate Settings Import or Export an XML file to use/save a previously configured set of license plate settings.

### **3.2 VIGIL Server Settings**

Pictured below is the VIGIL Server Settings tab.

🔅 Settings					8
VIGIL Server Setting	Add Edit Delete				
	IP Address	Port	Description		
2	VIGIL Server		<b>—</b>		
	Description:				
	IP Address:				
	Port:	22801	•		
	User Name:				
	Password:				
	Insert Plate Data	into VIGIL Server Datab	base		
_	Database Port:	2025	Test		
		ОК	Cancel		
				OK Cance	el

Figure 3-2: VIGIL ANPR Utility - Settings- VIGIL Server Settings Tab

- 1. Add/Edit/Delete Add, Edit or Delete a VIGIL Server DVR.
- Add/Edit VIGIL Server Window If you choose to Add or Edit a VIGIL Server DVR, the Add/Edit VIGIL Server window will open. Enter the appropriate information to add a VIGIL Server to the VIGIL ANPR Utility's list of VIGIL Server's.
  - Insert Plate Data into VIGIL Server Database Insert recorded plate data into the VIGIL database. This function essentially links this instance of the ANPR utility with VIGIL Server, enabling searching for plate data via VIGIL Software(Client, Server, etc...). On-screen display of plate data is dependent on this setting as it is managed through the VIGIL Server database.
  - Database Port Input the correct port number for the desired VIGIL Server's database. Click the Test button to confirm port validity.



### **3.3 Camera Settings**

Pictured below is the Camera Settings tab.

🔅 Settings					23
	1 Add Edit Delete				
🖬 a Camera Settings	Service ID Address Service A	Jama Cam Na Cam Nama	DIONO	Direction	Deer No
2 3 4 5	Add Camera  Add Camera  Use Hardware to Detect Plates VIGIL Server: Camera: Direction: Door Number:  Trigger VIGIL Server External Ala Select External Alarm to Trigger: Momentary Dwell Time:  Overview Camera IGIL Server: Camera:	Name Cam No Cam Name	DIO No	Direction	Door No
		<u>o</u> k	Cancel	ОК	Cancel

Figure 3-3: VIGIL ANPR Utility - Settings - Camera Settings Tab

- 1. Add/Edit/Delete Add, Edit or Delete an ANPR camera.
- Add/Edit Camera Window Configure your desired settings and click OK to add the camera to the VIGIL ANPR Utility.
- 3. Use Hardware to Detect Plates Enable this option if the camera you are adding has on-board ANPR capabilities. ANPR processing will be perforated on-board the camera, reducing CPU load for the system you have installed VIGIL ANPR on. Contact 3xLOGIC Support for a list of supported ANPR Cameras.
- 4. Trigger VIGIL Server External Alarm Select this option to trigger an external alarm whenever this camera captures a plate number.
  - Select External Alarm to Trigger Select the External Alarm to trigger in VIGIL Server.
  - Momentary Dwell Time Select the alarm dwell time (the amount of time the alarm will remain active after being triggered.)
- 5. **Overview Camera** Choose an overview camera. In most applications, this camera will be pointing in the same direction as your ANPR camera but with a larger field-of-vision. This method can be utilized to provide users with a full image of the area surrounding the ANPR camera's field-of-vision.
  - VIGIL Server Select the desired Overview Camera's host VIGIL Server.
  - **Camera** Select the VIGIL Server camera channel associated with your desired Overview Camera.

### 3.4 Standalone Camera Settings

Pictured below is the Standalone Camera Settings tab.

😝 VIGIL ANPR - 3xLOGIC Inc.						– 🗆 ×
Hide Sidebar Settings	Search	2 X 2 3 X 3	4 X 4	III Suspend All Thum	a ii onails About	
Settings					×	
ANPR Cam Thumbnell		dd Edit Delete				
VIGIL Server Camera	Settings Carr	nera Name Cam	iera ID IP	Address Port		
Snapshot	js	Camera Name: Camera Name: Camera ID: IP Address: Port: User Name: Password:	e Camera	X Cancel		r No E
				C	<u>O</u> K <u>C</u> ancel	
📰 UnRegistered: 30 trial days remaining 👘 🔽 0 camera(s) i	in use			<b>11</b> 5/23/2021	🕒 4:50:47 PM	

Figure 3-4:Standalone Camera Settings

- 1. Add/Edit/Delete Add, Edit or Delete a standalone ANPR camera.
- 2. Add/Edit Camera Window Configure your desired settings and click *OK* to add the camera to the VIGIL ANPR Utility. *Camera Name, ID, IP Address, Port* and login credentials must included. Click *OK* to save the new standalone camera.



### **3.5 Email Settings**

Pictured below is the *Email Settings* tab.

🔅 Settings			<b>—</b> ×-
	Email Settings		
1	SMTP Server Location:		Test Email
	Port Number:	25	
Email Settings	From (Name):		
	From (Address):		
	Requires SSL		
	Authentication		
2	🥖 📃 Requires Authentication		
_	User Name:		
	Password:		
	With Attachment		
	Attachment Images Quality:	:	
	Reduced Quality		
	Full Resolution		
			<u>O</u> K <u>C</u> ancel

Figure 3-5: VIGIL ANPR Utility - Settings - Email Settings Tab

- 1. Email Settings Configure email settings in this section. Email notifications can be enabled on the License List Settings tab.
  - **SMTP Server Location** Define the location of your emails SMTP server.
  - **Port Number** Define the port number associated with the emails SMTP Server.
  - From(Name) The email's From name.
  - From(Address) The email address
  - **Requires SSL** -Enable this box of this account requires SSL.
- 2. Authentication If the configured email requires authentication, the information can be entered here.
  - Requires Authentication- Check this box to indicate the above configured email address requires authentication.
    - **Username/Password** Enter the email accounts login credentials.
- 3. With Attachment Enable this option to include an image of the associated event in your notification email.
  - **Reduced Quality** Select this option to attach a reduced quality image to your notification emails.
  - Full Resolution Select this option to attach a full resolution image to your notification emails.

### **3.6 License List Settings**

VIGIL ANPR Utility allows the user to compile lists of known license plates numbers. When a number on the list is encountered, the utility can be configured to trigger an alarm or relay in Server or send an email notification to a recipient(s) of your choosing. This feature can be used to quickly identify stolen vehicles or known high-risk offenders, or to automatically permit access (using DIOs in conjunction with VIGIL Server) to gated communities, parking garages, etc.

The *License List Settings* tab is pictured below.

🔅 Settings	
License List Settings	1       Add       Edit       Delete         2       Directory:       Image: CSV File ima
	Description         Server Name         Server IP Address         Trigger External Alarm         External Alarm No         S

Figure 3-6: VIGIL ANPR Utility - Settings - License List Settings Tab

- 1. Add/Edit/Delete a License List Add, Edit, or Delete a license plate hot list.
- 2. Enable Automatic List Import -
  - **File Type** Select the auto-import file type. Available file types include .csv or .txt.
  - Directory Click the ... button to select the location of the auto-import file. VIGIL ANPR will poll his location for an updated file
- 3.6.1 Add / Edit License List

8

When adding or editing a license list, the following window will deploy.

Descr	iption:	
E	nable Trigger External Alarm —	
VIGIL	. Server:	
Selec	t External Alarm to Trigger:	Not Assigned
Mome	entary Dwell Time:	2 Seconds
E	nable Sending Email	
Emai	il Configuration:	
+ Add	Edit Delete Import Fy	•
+ Add	Edit Delete Import Exp	soort
Add Jo	Edit Delete Import Exp	Description
Add Jo	Edit Delete Import Exp	Description
Add Jo	Edit Delete Import Exp	Description
Add Jo	Edit Delete Import Exp	Description
Add	Edit Delete Import Exp	Description

Figure 3-7: License List Settings - Add / Edit License List Window

- 1. **Description** Name the list so it can be quickly identified.
- 2. Enable Trigger External Alarm
  - VIGIL Server Select the VIGIL Server to trigger the alarm on. VIGIL Servers can be added in the <u>VIGIL</u> Server Settings window.
  - Select External Alarm to Trigger Select the External Alarm to trigger in the chosen VIGIL Server.
  - **Momentary Dwell Time** Set the dwell time for the alarm(length of alarm after being triggered)
- 3. Enable Sending Email Enable Email Notifications for this list. When enabled, VIGIL will email a user when a number on the hot list is recorded.
  - **Email Configuration** Opens the E-mail Configuration window.
- 4. Add/Edit/Delete License Plate Number Add, Edit or Delete a license plate number to the license plate hot list. A description can be included with the plate number.
- 5. **Import/Export License Plate Numbers** Import pre-configured license plate numbers from an excel or text file (.xlsx, .txt).

### **3.7 Export Settings**

Pictured below is the *Export Settings* tab.

🔅 Settings	X	3
Export Settings	Export Datas Type: Save As TXT File Folder Location: Max File Size: 5000 (<=5000) KB	
	2       Image: Save As JPEG Snapshot         3       Burn In License Location Indicator         3       Folder Location:       c:         Delete Snapshots After       30       (<=30) Days	
	4 Server IP: Server Port: 22799	
	QK <u>C</u> ancel	

- 1. Save as TXT File Save plate data in .txt format. Select a folder to save the text files in by clicking the ... button next to the *Folder Location* field.
- 2. Save as JPEG Snapshot Save JPEG Snapshots of footage frames featuring recorded snapshots. Select a folder to save the snapshot files in by clicking the ... button next to the *Folder Location* field. Set a *Delete Snapshots After* value which is less than or equal to 30 days.
- 3. Burn In License Location Indicator Highlights the location of the captured plate in the JPEG snapshot by surrounding the plate in a red rectangle(pictured below.)



Figure 3-8: Burn in License Location Indicator - Location Indicator Example

- 4. Enable XML Output Enable this feature to output plate data in XML format to a specific IP Address and Port for integration with third party software.
  - **Server IP/Port** Enter the IP and Port number of the entity which will receive the XML data.
  - **Test** Test the connection between the VIGIL ANPR utility and the configured entity.

### **3.8 Miscellaneous Settings**

Pictured below is the *Miscellaneous Settings* tab. From this tab, a user may configure column ordering and visiliblity for the main screen's event list.

🛟 Settings		
3	Miscellaneous Settings: Show License Location Indicator on Thumbnail Column Settings Up Down 2	
Miscellaneous Settings	Columns         I       Plate Number Thumbnail         I       Plate Number Thumbnail         I       ANPR Camera Thumbnail         I       Overview Camera Thumbnail         I       Time Stamp         I       Flate Number Text         I       6         Camera Number       7         I       Server IP         I       Boor Number         I       9         Direction         I       External Alarm Number         I       11         Confidence	
		<u>O</u> K <u>C</u> ancel

Figure 3-9: VIGIL ANPR Utility - Settings - Miscellaneous Settings Tab

- 1. ANPR Event Column Check off a column to enable or disable column visibility.
- 2. **Up/Down** When a column is selected in the list, use the *Up/Down* controls to adjust column order.
- 3. Show License Location Indicator on Thumbnail Enable this option to show the license location indicator on thumbails. After a plate is captured, the portion of the image that the plate was captured from will be highlighted on the thumbnail.

### **3.9 Registration Settings**

Pictured below is the *Registration Settings* tab.

🔅 Settings		100		×
1	ANPR Registration			
	3xLOGIC Inc. VIGIL	ANPR - Registration		
Registration Settings	<b>4</b>	VIGIL ANPR R	legistration	
		Serial Number	123456789ABC	
	Registered Modules		Unregistered Modules	
			ANPR Utility	-
			Registration Key	
			Contact: support@3xlogic.com	
			Register Exit	
			ОК	Cancel

Figure 3-10: VIGIL ANPR Utility - Settings - Registration Settings

- 1. ANPR Registration Click this button to open the VIGIL ANPR Registration window.
- 2. **ANPR Registration Window** From the VIGIL ANPR Utility Registration Window, a user may enter their ANPR Utility registration key(obtained via 3xLOGIC WebReg) and register the utility.



# 4 Alarms

Click the *Alarm* button in the icon menu to open the below-pictured Alarms Window. Number/license plates recorded by the ANPR Utility belonging to a License Plate Hot List will be displayed here for quick retrieval and review.

😝 Vigil Anpr - 3×logic	) Inc.						– 🗆 ×
Hide Sidebar Settings	Alarm	Search Thur	mbnails About				
🖸 Clear 🛗 Clear All	4					-	
Snapshot	ANPR Camera	Overview Camera	Time Stamp	Plate Number	Camera No	Server IP	Door No C
CF6+B486	<u>19</u>	V=	2015-5-21 14:01:58	CF6 - B486	1	10.1.11.289	2
1							
Total Alarms: 0							
🐺 UnRegistered: 29 trial days ren	naining 🖳 O came	era(s) in use			iii 5/21/20	015 🕒 10:	39:46 AM

Figure 4-1: VIGIL ANPR Utility - Alarms Window

- 1. ANPR Alarm Events List All plates recorded belonging to a license hot list will be displayed here.
- 2. Clear/Clear All Select *Clear* to clear the currently selected alarm event or select *Clear All* to clear all listed events.

# 5 Search

To open the Search window, select the *Search* icon from the Icon Menu Toolbar.

😝 VIGIL ANPR - 3xLOGIC Inc.			- 0	×
Hide Sidebar Settings				
Search Criteria Main Camera 4	Overview Camera			
Quick Search: Last Hour				
From: 5/19/2015 2:01:16 PM				
To: 5/19/2015 To: 5/19/2015				
AND - Match All Selected				
OR - Match Any Selected				
NOT - Not Match All Selected  Plate Number:				
Camera Number:				
Server:				
Door Number:				
Direction:				
External Alarm Number:				
Only Alarm Events				
Reset Search Advanced II	<b>5</b> H			
Snapshot 💭 ANPR Camera Overview Camera Time Stamp Plate Number	Camera No	Server IP	Door No	
· [				Þ
Total Results: (0)   ↓ ↓ 1 / 1   ▶ ▶				
😽 UnRegistered: 23 trial days remaining 🛛 🔽 O camera(s) in use	<b>19/20 5/19/20</b>	015 🕒 3:01	:27 PM	

Figure 5-1: VIGIL ANPR Utility - Search Window

- 1. Search Criteria Enter the criteria for your search.
  - Quick Search Select a pre-defined time frame for your search. Options include the last 1, 2, 4, 8, 12, 48 Hours as well as a *Last Week* option.
  - **To/From** Manually define the search time-frame.
- 2. Search Options Define the search parameters listed below.
  - AND/OR/NOT Choose a logical operator for your search. AND will returns results matching all defined parameters. OR will return results matching one or more of the defined parameters. NOT will returns all results which contain NONE of the defined parameters.
  - **Plate Number** Define a specific plate number as a search parameter.
  - **Camera Number** Define a specific camera as a search parameter.
  - **Server** Define a specific VIGIL Server as a search parameter.
  - **Door Number** Specify a door number as a search parameter.
  - Direction Specify a direction as a search parameter.
  - **External Alarm Number** Specify an external alarm number as a search parameter.
  - **Only Alarm Events** Select this option to return only data associated with an alarm event.
- 3. Search Results All search results will be compiled here in list format.
- 4. **Playback Viewing Area** Playback from the associated ANPR and Overview cameras for the selected search result will be visible in this area.
- 5. Playback Controls Standard controls for viewing and navigating playback footage.

# **6** Thumbnails

Click the Thumbnails button in the Icon Menu Toolbar to open the below-pictured ANPR Thumbnail Browser.



Figure 6-1:VIGIL ANPR Utility - Thumbnail Browser

- 1. Thumbnail Browser Thumbnails captured by the ANPR Utility will be displayed here.
- 2. **Thumbnail Browser Page Controls** When multiple pages of thumbnails are returned, use these controls to navigate to the next/previous page.

# 7 VIGIL ANPR Utility - Successful Application - Example

After adding a camera(s) and configuring ANPR settings, the camera live view will display as pictured below. Both ANPR and overview cameras can be added to live view from the camera list via drag-and-drop. When a plate is captured and data is recorded (an ANPR Event), the plate data is listed in the ANPR Event list.



Figure 7-1: VIGIL ANPR Utility - Successful Application - Example

If you are receiving live footage from configured cameras and plate numbers are being successfully recorded and displayed in the ANPR Event list, then you have successfully configured the VIGIL ANPR Utility.

### **8 Integration with VIGIL Server and Client**

Although VIGIL ANPR Utility is a standalone application, some of its components have been engineered with full VIGIL system integration in mind.

Integration with VIGIL POS (VPOS) allows for real-time OSD (On-Screen Display) of plate data in VIGIL Client via the VIGIL Server serive, while the ANPR's ability to utilize the VIGIL suite's *Relay/DIO/Alarm* feature set adds yet another layer of depth, functionality and customization to your VIGIL surveillance network.

### 8.1 Utilizing VIGIL Alarms/Relays

If desired, the VIGIL ANPR Utility can be configured to trigger an alarm in VIGIL Server. This alarm could trigger recording on a defined number of camera and/or can be configured to trigger another relay which could potentially result in any number of desired outputs.



**Example:** An ANPR Camera and three standard IP cameras overlook a section of road/parking lot. When the ANPR Camera records a plate, the VIGIL ANPR utility can be configured to trigger an alarm in Server which in turn could be configured to trigger recording on the other 3 cameras. VIGIL could also be configured to have this external alarm trigger a DIO which can result in any number of outputs(open a parking garage gate, raise a security barrier, etc...).

### 8.1.1 Configuring AUX Device Settings in VIGIL Server

The first step in configuring Relays for use with the VIGIL ANPR utility is to configure VIGIL Server's AUX Device settings so that it may communicate with VIGIL ANPR (which acts as a standalone utility.)

To open VIGIL Server's AUX Device Settings:

- 1. Select *Advanced Settings* by right-clicking the VIGIL Server Icon in the Windows Quick tray. Logging in to the VIGIL Server may be required.
- 2. When the Advanced Settings form deploys, select the Server Settings tab.
- 3. Select AUX Device Settings.
- 4. Select Add.

🖳 Camera Setup 🔎 Server Settings 🛛 🍥 Media Drives 🗎 👳 COM Ports 🗎 🞎	, Users   💂 Relays/Alarms   📑 Data   📢 Audio		
Site Name Site Name: 2 rendan's Demo Server	Allow Auto Detect		
General Startup Live Search Cameras Clients Sequence Hardware VIGIL Connect Proxy Help Menu			
4 X Device Settings	Nd:     65     View     Memory Warning Threshold:     85     %       NTP Service     View     Scavenger Threshold:     2     %		
Add Edit Delete Up Down	AUX Device Settings Keyboard Settings		
Device     Inputs     Outputs     Aux Serial Port       External Alarm     1 - 8	Edit DIO Device   Type:   External Alarm   Network Settings   Port:   22899   DIO Number Settings   DI Number:   8		

Figure 8-1: Configuring VIGIL Relays for use with ANPR Utility- Configuring AUX Settings in VIGIL Server

- 5. In the Add/Edit DIO Device window, select *External Alarm* in the Type drop-down menu.
- 6. The DI Number field will set the amount of digital relay inputs in VIGIL Server that will be reserved for VIGIL ANPR Utility.

Click OK on all windows to save the new settings.

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### 8.1.2 Configuring Relay Settings in VIGIL ANPR Utility

Now that you have configured VIGIL Server to communicate with the VIGIL ANPR Utility, the ANPR utility must also be configured to locate and communicate with the desired VIGIL Server.

From the VIGIL ANPR Utility interface:



Figure 8-2: Configuring VIGIL Relays for use with ANPR Utility- Configuring Relay Settings in VIGIL Server

- 1. Click Settings.
- 2. Select the Camera Settings tab.
- 3. Select Add (or Edit if the desired ANPR Camera has already been added to the utility.)
- 4. Enable the *Trigger VIGIL Server External Alarm* option.
- 5. Select an alarm to trigger on the associated VIGIL Server.
- 6. Set a Momentary Dwell Time (the amount of time the alarm will remain in a triggered state.)
- 7. Click OK to save the new settings.

### 8.1.3 Configuring Relay Settings in VIGIL Server

After configuring the AUX Settings in VIGIL Server, the Relays/Alarms Settings must also be configured. This step will essentially assign the relay to a defined set of cameras which will begin recording whenever the relay is triggered.

To configure the *Relays / Alarms Settings* for use with the VIGIL ANPR Utility:

1. Open the VIGIL Server *Advanced Settings* via right-clicking the VIGIL Server service icon in the Windows Quick tray and selecting *Advanced Settings*. You may be required to login to the VIGIL Server. The settings form will deploy as pictured below.

Camera Setup Server Settings Media D Inputs Outputs Digital Inputs Input Enabled 1: External Alarm - 1 Settings Notification Settings Settings Over 5 Settings Over 5 Settings Seconds Normal Closed 6 5 Auto Acknowledge Enabled After: 10 Seconds Schedule Enabled Push Still Shot to Server Enabled	rives COM Ports Lusers Relays/Alarms Data Audio
Remote Client Retry Settings	Retry Delay: 60 ÷ Seconds 7 QK <u>Cancel Apply</u>

Figure 8-3: Configuring VIGIL Relays for use with ANPR Utility - Configuring Relay Settings in VIGIL Server

- 2. Select the Relays/Alarms tab.
- Select the *Input Number* you wish to assign to the cameras. Be sure to use one of the input numbers you configured previously in the VIGIL Server AUX Settings (See "Configuring AUX Device Settings in VIGIL Server" on page 18 for more info).
- 4. Check off the *Input Enabled* checkbox.
- 5. Under the *Cameras* tab, check off any cameras you wish to be associated with this *Relay / Input*.
- 6. Set a *Dwell Timer*value (in seconds).



**Note:**The *Dwell Timer* value plus the *Momentary Dwell Time* value configured in the<u>See "Configuring</u> <u>Relay Settings in VIGIL ANPR Utility" on the previous page</u> will give you the total duration (in seconds) for which the selected cameras will record when the relay is triggered/input is received.

7. Click OK or Apply to save the newly configured settings.

### 8.2 Configuring VIGIL Server POS OSD to Display ANPR Data

If desired, VIGIL Cleint ) can be configured to display plate data from the VIGIL ANPR Utility using the VIGIL Server Service's POS On-Screen Display functionality. Follow the steps in the proceeding sub-sections to configure VIGIL to display ANPR data via OSD.

### 8.2.1 Enabling Data Insertion Into the VIGIL Server Database

In order to enable OSD (on-screen display) of ANPR number plate data, the VIGIL ANPR Utility must be configured to insert data it records directly into the VIGIL Server database.

To enable data insertion:

VIGIL ANPR - 3x Hide Sidebar Settings	1X1 2X2 3X3 4X4 Stop All Suspend All Thumbnail
Settings	Add Edit Detete
Email Settings License List Settings Export Settings Miscellaneous Settings Snapsho	Description: IP Address: Port: 22801 User Name: Password: Insert Plate Data into VIGIL Server Database
4	OK Cancel

Figure 8-4: Configuring VIGIL POS OSD to Display ANPR Data - Enabling Data Insertion into VIGIL Database

- 1. From the VIGIL ANPR Utility interface, click the Settings button.
- 2. Select *VIGIL Server Settings* tab from the side menu.
- 3. Add/Edit a Server.
- 4. On the VIGIL Server Settings form for the chosen Server, enable the *Insert Plate Data Into VIGIL Server Database* option.
- 5. Click OK to save the new settings.

### 8.2.2 Configuring OSD Settings in VIGIL Server

After configuring the VIGIL ANPR Utility to insert data into the VIGIL Server database, VIGIL Server itself must be configured to receive the data and make it available for display.

To configure the VIGIL Server Settings for on-screen display of the ANPR plate data:

1. Open the VIGIL Server *Advanced Settings* via right-clicking the VIGIL Server service icon in the Windows Quick tray and selecting *Advanced Settings*. You may be required to login to the VIGIL Server. The settings form will deploy as pictured below.

Advanced Settings
😴 Camera Setup   📾 Server Settings   🍥 Media Drives   👳 COM Ports   🎎 Users   🚇 Relays/Alarms 📑 Data 🛛 📫 Audio
POS/ATM Connection Settings
POS/ATM Connections: Connection 1   Finabled
PO5/ATM Settings
Connection Type: Serial
POS/ATM Connection Type: <a>Not Specified&gt;</a>
Priority Camera: Settings
└────────────────────────────────────
Enabled Dwell Time: 5 Seconds Filter Settings
Output Relay: None Trigger: Momentary 💌
3
General Settings Email Settings Ignore Fields External POS/ATM-Data External Data Interface
xternal POS/ATM Data
Enable External POS/ATM Data
Priority Camera: Settings
Add Edit Delete
Connection Register Number Priority Camera
📽 Priority Camera Settings 🖊 7
Priority Camera: Camera 01 - Cam1
QK Cancel QK Cancel

Figure 8-5: Configuring VIGIL POS OSD to Display ANPR Data - Configuring OSD Settings in VIGIL Server

- 2. Click the Data tab.
- 3. Click the External POS/ATM Data tab.
- 4. Check off the Enable External POS/ATM Data option.
- 5. Click the Priority Camera Settings button.
- 6. Click Add.
- 7. In the *Connection Number* and *Register Number* fields, enter the VIGIL Server camera number of the ANPR camera/camera being used to record plate data.
- 8. Select the desired Priority Camera(the camera stream which will feature OSD of the plate data in VIGIL.)



**Example:** If the ANPR camera being used to record plate data is Camera 1 in VIGIL Server, set the *Connection Number* and *Register Number* fields to 1. The *Priority Camera* (the camera on which the OSD data will be visible) can be any relevant camera of your choosing.

### 8.2.3 Viewing ANPR Data OSD

After configuring both VIGIL Server and the VIGIL ANPR Utility, enable OSD on the *Priority Camera* you selected in the previous section in either VIGIL Client begin the on-screen display of ANPR data (example pictured below.)



Figure 8-6: Viewing ANPR OSD in VIGIL Client

When using VIGIL Client, you may configure the appearance of the on-screen display data by clicking the *OSD* button(circled in red, above) and adjusting column positioning, select visible headers and more, to best suit your application of the ANPR Utility.

OSD data will also be visible in the VIGIL ANPR's Live Viewer(pictured below.)



Figure 8-7: Viewing ANPR OSD in the VIGIL ANPR Utility

# **9 Version Control**

Version Number/Date	Notes
1.0.0 - June 27th, 2014	Initial Release of User Guide as Document 140038.
1.1.0 - July 26th, 2014	<ul> <li>Templated content with "VIGIL Core Software User Guide" Template.</li> <li>Documented "Burn In License Location Indicator" Feature.</li> </ul>
2.0.0 - April 22nd, 2016	<ul><li>Rebranded and reformatted to meet new corporate branding guidelines.</li><li>Documented changes to main UI.</li></ul>
2.0.1 - May 22nd, 2016	<ul> <li>Added Search, Alarm, Thumbnails, Misc, Email and License List Settings sections in preparation for v8 release.</li> </ul>
2.5.0 - October 23rd, 2016	Updated software version numbers across guide to reflect VIGIL 8.5 release.
3.0.0 - April 8th, 2016	Updated for VIGIL 9.
4.0.0 - Oct 28th, 2016	Updated for VIGIL 9.5
5.0.0 - June 15th, 2017	Updated for VIGIL 10
6.0.0 - March 14th, 2019	<ul> <li>Updated for VIGIL 10.5</li> <li>Added Auto License List Import fields to License List Settings</li> <li>Added Use Hardware to Detect Plates feature to Camera Settings</li> <li>Added Show License Location Indicator on Thumbnail settings to Misc Settings</li> </ul>
6.0.1 - June 6th, 2019	Updated for VIGIL 10.50.0400
7.0.0 - September 23rd, 2019	Updated for VIGIL 11.00.0000
8.0.0 September 17th, 2020	<ul><li>Updated for VIGIL 11.50.0000</li><li>Added Standalone Camera Settings menu.</li></ul>
9.0.0 - April 19th, 2021	

# **10 Contact Information**

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# 3xLOGIC VIGIL

Simple. Scalable. Secure.

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