

# **GV-LPR Center**

# User's Manual V3.1





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July 2009

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### **Chapter 1 Introduction**

With the LAN or Internet connection, the GV-LPR Center provides central management and remote control of up to 255 channels of client GV-LPRs and GV-DSP LPRs. In addition to accessing live view from the clients' sites, you can synchronize the clients' databases with those of GV-LPR Center.

### **1.1 Overview**



Figure 1-1

### **GeoVision**

No.	Name	Function
1	Recognition Records	Display up to 5000 recent recognition records from the connected GV-LPRs and GV-DSP LPRs.
2	Output Trigger Switch	Trigger the outputs of connected GV-DSP LPRs.
3	Live View Window	Display the live view of the connected camera.
4	Camera Caption	Display the number of the connected camera.
5	Live View Page	Up to 16 cameras can be assigned to one View Page, and up to 255 View Pages can be created.
6	Add a page	Add a new View Page.
7	Insert a page	Insert a new View Page.
8	Delete this page	Delete the current View Page.
9	Screen divisions	There are options of 1, 4, 9 and 16 screen divisions.
10	Previous division	Go to the previous screen division.
11	Next division	Go to the next screen division.
12	Recognition Database	Open the Recognition Database.
13	Registered Plate Database	Open the Registered Plate Database.
14	Registered Plate Database Sync	Start the synchronization of the Registered Plate Databases at GV-LPR Center with those of the connected GV-LPRs.
15	Remote Desktop	Open Remote Desktop to control the desktop of the connected GV-LPR.
16	Connection Lists	Display two lists: Assigned View Pages and Online Client.
17	Image	Display the image of recognized license plate.
18	License Plate	Display the recognized license plate number.

### **1.2 Assigning Cameras to View Pages**

A View Page functions as a group, and you can group cameras from different GV-LPRs and GV-DSP LPRs on one View Page. On the View Page, you can view live images from the connected cameras. Up to 16 cameras can be assigned to one View Page, and the cameras can be repeatedly assigned to different Pages. Up to 255 View Pages can be created.

To assign cameras to the View Pages, select the desired camera from the Online Client category (No. 16, Figure 1-1), and drag it to the desired Live View Window on the View Page (No. 3, Figure 1-1).



### **1.3 Viewing Camera Properties**

You can view the details of the connected cameras assigned on the View Page.

Click the desired camera from the Assigned View Page field (No. 16, Figure 1-1). This dialog box appears.

Camera Property	y 🔀
Device OVR	C Stand-alone
Client Name	LPR-TEST111
IP Address	127.0.0.1
User Name	TEST111
Password	
Command Port	4550
Data Port	5550
Audio Data Port	6550
Camera ID	1
Camera Name	Camera 1
0	K Cancel

Figure 1-2

Note that any changes made in the dialog box might affect the connection to the camera.

### **GeoUision**

### **1.4 Accessing Recognition Data**

You can access the captured image and recorded data of the recognition result.

In the Recognition Records field (No. 1, Figure 1-1), click the desired record. This dialog box appears.

Recognition Data	×
Becognition	Client Name
	TEST186-EC721CA
0.08	Camera ID
	1
	Camera Name
	Camera 1
	Direction
L702 XHR	Event Time
	2019/07/28 - 21:52:18
710220	Registered Plates Data
7102AG	LICENSE_PLATE
88   18   45   91   92   38	REGISTERED_ID
Overview-1 Overview-2 Overview-3	NAME
	IDENTITY
	ADDRESS
	TICKET
Overview-4 Overview-5 Overview-6	TEL_COUNTRY_CODE
	TEL_NUMBER
	E-MAIL
	PHOTO_PATH1
	MEMO
	ACTIVATION_DATE
GeoVision Inc	EXPIRATION_DATE
	VALID_CAMERA
	Recent of a statement

Figure 1-3



# **Chapter 2 Configuration**

### 2.1 Center Listen Port Setting

The Center Listen Port is used for the connection to the client GV-LPRs and GV-DSP LPRs. The default port is 7550. Keep the default value and make sure the Command Ports at the GV-LPR and GV-DSP LPRs are set with the same value.

Click **Option** on the menu bar and select **Preference**. This dialog box appears.

Preference	
Center listen port	
7550	
ОК	Cancel
Ei.	

Figure 2-1

### C GeoVision

# **Chapter 3 Remote Management**

With the connection over LAN or Internet, the GV-LPR Center operator has a full control over the client GV-LPR and its operating system.

### **3.1 Starting Connection with the Clients**

The GV-LPR Center can connect to up to 255 channels of client GV-LPRs and GV-DSP LPRs. To start connection, follow these steps:

#### At the GV-LPR site:

The client GV-LPR must activate **WebCam Server** and **Connect to** GV-LPR Center options. For details, see Chapter 7 "Network" in *GV-LPR User's Manual*.

#### At the GV-DSP LPR site:

The client GV-DSP LPR must set up and activate its GV-LPR Center service. For details, see *4.1.3* GV-LPR Center in GV-DSP LPR User's Manual.

### 3.2 Remote Desktop

Viewing the client desktop as website view, the GV-LPR Center operator has a full control over the client GV-LPR and its operating system. In addition, you can also transfer files between GV-LPR Center and the client GV-LPR through the connection.

- 1. The client GV-LPR must activate **Remote Desktop Server** first. For details, see 7.3 *Remote Desktop Server* in *GV-LPR User's Manual.*
- 2. At the GV-LPR Center site, click the **Remote Desktop** button (No. 15, Figure 1-1) on the toolbar or **Tools** on the menu bar and select **Remote Desktop**.

Connect to server.		X
<u>A</u> ddress:	192.168.0.117	Connect
ID:	Тре	Cancel
<u>P</u> assword:	•••••	
<u>C</u> ommand Port:	3388	
<u>D</u> ata Port:	5611	
Connection <u>S</u> peed:	LAN (10 Mbps or higher)	

Figure 3-1



- 3. Type the IP address, ID and password of the GV-LPR to be connected to.
- 4. Keep the Command Port and Data Port as default, unless otherwise necessary.
- In the Connection Speed field, select the Internet connection speed to suit your needs: Modem (56 Kbps), Broadband (128 Kbps – 1.5 Mbps) and LAN (10 Mbps or higher).
- 6. Click **Connect** to start the connection.

#### 3.2.1 Transferring Files

With the Remote Desktop feature, you can transfer files easily between the GV-LPR Center and client GV-LPR.

- 1. Click the **File Transfer** button on the upper left corner of the Remote Desktop. The File Transfer Service dialog box appears.
- 2. Select the desired file to transfer to **Local** (the GV-LPR Center) or **Remote** (the client GV-LPR).

		Remote (192.	168.0.254)		
V	6	C:\			× 82
Size Modify Tim	ne 🔿	Name		Size	Modify Tir 📤
9/12/2016 8/28/2016 8/24/2016 9/11/2016	5: 4: 9: 4: •••••••••••••••••••••••••••••	Document     FOUND.00     NVIDIA     Program F     Recycled     System Vo     WINDOWS     AUTOEXE     boot.ini     BOOTSEC     CONFIG.S	ts and Settings 00 iles olume Informa S C.BAT T.DOS YS	0.00 KB 0.24 KB 0.50 KB 0.00 KB	12/26/201 12/26/201 12/26/201 12/26/201 12/26/201 12/26/201 12/26/201 9/11/2006 12/26/201 12/26/201
Size	Progress	Local	+	Remote	
0.50 KB	100%	D:\	4	C:\BOOTSEC	T.DOS
	Size Modify Tim 9/12/2016 8/28/2016 8/24/2016 9/11/2016	Size       Modify Time         9/12/2016 5:       8/28/2016 4:         8/28/2016 4:       8/24/2016 9:         9/11/2016 4:       9/11/2016 4:         1       1	Size       Modify Time         9/12/2016 5:       9/12/2016 5:         8/28/2016 4:       0.00000000000000000000000000000000000	Size Modify Time   9/12/2016 5:   8/28/2016 4:   8/28/2016 9:   9/11/2016 4:   9/11/2016 4:   9/11/2016 4:   WINDOWS   AUTOEXEC.BAT   boot.ini   BOOTSECT.DOS   CONFIG.SYS	Size       Modify Time         9/12/2016 5:       Image: Size         8/28/2016 4:       Image: Size         8/28/2016 4:       Image: Size         8/24/2016 9:       Image: Size         9/11/2016 4:       Image: Size         Image: Size       Image: Size

Figure 3-2

**Note:** The size of one single file for transfer cannot exceed 4GB, but multiple selections of files do not have size limit.

### C GeoUision:

## **Chapter 4 Database Management**

Two types of databases are available in GV-LPR Center: Recognition Database and Registered Plate Database. The Recognition Database stores recognition results, and the Registered Plate Database provides data for the opreator match the recognition results. In addition, the Registered Plate Database can serve as the main database and synchronize with the other Registered Plate Databases of the client GV-LPRs.

### 4.1 Recognition Database

The Recognition Database records the information of the recognized vehicles: image, camera, license plate number, date, time and direction. A hard drive of 80GB can record about 1 million records of data.

Click the **Recognition Database** (No.12, Figure 1-1) button to open the Recognition Database.

Recognition Da	itabase										
File(O) Operate(O)	Record(O) Vie	w(O)									
12 A3 E					-						
					D						
HOST_NAME	LICENSE_PLATE	CAMERA NUM	DIRECTION	EVENT_TIME	STAY_TIME	AVERAGE_SPEED	IDENTIFY_NUM	ALARM_NUM_EVENT_	TRIGGER	PLATE_COLOR	^
TEST186-EC721CA	AF114GX	1	Incoming	7/28/2019 9:55:26 PM			Visitors	Motion E	etection		
TEST186-EC721CA	A PKD4KXT	1	Incoming	7/28/2019 9:55:26 PM			Visitors	Motion E	etection		
TEST186-EC721CA	425GCDT	1	Incoming	7/28/2019 9:55:21 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	31JF711	1	Incoming	7/28/2019 9:55:16 PM			Visitors	Motion E	etection		1
🗬 TEST186-EC721CA	79E3LJ7	1	Incoming	7/28/2019 9:55:16 PM			Visitors	Motion E	Detection		
🐙 TEST186-EC721CA	V495ABE	1	Incoming	7/28/2019 9:55:15 PM			Visitors	Motion E	Detection		
🗬 TEST186-EC721CA	A SEG7Y	1	Incoming	7/28/2019 9:55:13 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	VKO5ERY	1	Incoming	7/28/2019 9:55:13 PM			Visitors	Motion E	Detection		
🗬 TEST186-EC721CA	FZ727A	1	Incoming	7/28/2019 9:55:11 PM			Visitors	Motion E	Detection		
🗬 TEST186-EC721CA	G9E35F	1	Incoming	7/28/2019 9:55:11 PM	<u>.</u>		Visitors	Motion E	etection		
TEST186-EC721CA	A P965G1E	1	Incoming	7/28/2019 9:55:10 PM			Visitors	Motion E	etection		
TEST186-EC721CA	A SB53VZP	1	Incoming	7/28/2019 9:55:10 PM			Visitors	Motion E	etection		
TEST186-EC721CA	4 355GK1	1	Incoming	7/28/2019 9:55:09 PM			Visitors	Motion E	etection		
TEST186-EC721CA	4 353GKD	1	Incoming	7/28/2019 9:55:09 PM			Visitors	Motion E	etection		
TEST186-EC721CA	A R355GC	1	Incoming	7/28/2019 9:55:09 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	4 Y29VVV	1	Incoming	7/28/2019 9:55:07 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	WR53EBL	1	Incoming	7/28/2019 9:55:06 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	4 1W51JM	1	Incoming	7/28/2019 9:55:03 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	A OWSJMU	1	Incoming	7/28/2019 9:55:03 PM			Visitors	Motion E	etection		
TEST186-EC721CA	51AXA	1	Incoming	7/28/2019 9:54:58 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	A HNSAXA	1	Incoming	7/28/2019 9:54:58 PM			Visitors	Motion E	etection		
TEST186-EC721CA	A VAK12KZ	1	Incoming	7/28/2019 9:54:56 PM			Visitors	Motion E	Detection		
TEST186-EC721CA	JZ4G3GB	1	Incoming	7/28/2019 9:54:55 PM			Visitors	Motion E	Detection		
TEST186-EC/21CA	A J24E3FB	1	Incoming	7/28/2019 9:54:54 PM			Visitors	Motion L	etection		~
12 TECT 102 Er 1917 A	1940000		Incomina	7/20/2010 0.64.64 0M				Motion			
							REGISTERED ID				
	A COMPANY	14		CONTRACTOR OFFICE	-	COLUMN TWO IS NOT	NAME				
							IDENTITY				
				Contraction of the local division of the loc		A Part Part	ADDRESS				
(1) (h 2)	P 965 FCE		1000	(B) (B+)		C. C. C.	TICKET				
			100 C				TEL_NUMBER				
CONSERVATION			1025			and the second second	E-MAIL				
			States of Concession, Name			Service States	MEMO				
			100 C			- Contraction of the	ACTIVATION_DA	TE			
			1957			The second second	EXPIRATION_DA	TE			
			100				VALID_CAMERA				
			1000								
			100								
						Contraction of the second					
Contraction of the local distance					AND DATE OF STREET, ST. S.	and an array of the second					
							Log: 1-2-	4, Total 81 record(s)			1.

Figure 4-1

For details, see Chapter 4 "Recognition Database" in GV-LPR User's Manual.

### 4.2 Registered Plate Database

Registered Plate Database is designed to store the necessary information of license plates, providing data for the operator to manage the recognized vehicles.

Click the **Registered Plate Database** button (No. 13, Figure 1-1) to open the Registered Plate Database.

Recognition Da	tabase									
File(O) Operate(O)	Record(O) Viev	v(O)								
					3					
HOST_NAME	LICENSE_PLATE	CAMERA_NUM	DIRECTION	EVENT_TIME	STAY_TIME AVERAGE_SPEED	IDENTIFY_NUM A	LARM_NUM	EVENT_TRI	GGER PLATE_COLOR	~
TEST186-EC721CA	TB5893	1	Incoming	7/28/2019 10:11:55 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	T85899	1	Incoming	7/28/2019 10:11:54 PM		Visitors	-	Motion Dete	ection	
TEST186-EC721CA	T881D	1	Incoming	7/28/2019 10:11:53 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	T88E33	1	Incoming	7/28/2019 10:11:53 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	T85899	1	Incoming	7/28/2019 10:11:53 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	T8139D	1	Incoming	7/28/2019 10:11:51 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	T115893	1	Incoming	7/28/2019 10:11:43 PM		Visitors		Motion Dete	ection	
TEST186-EC/21CA	TE15899	1	Incoming	7/28/2019 10:11:42 PM		Visitors		Motion Dete	ection	
TEST100-EC/21CA	V0E2E11	1	Incoming	7/20/2019 10:10:31 PM		Visitors		Motion Dete	sction	
TEST186-EC721CA	VOESEDK	1	Incoming	7/20/2019 10:09:47 PM		Visitors		Motion Dete	action	
TEST186-EC721CA	HYC13	1	Incoming	7/28/2019 10:09:33 PM		Visitors		Motion Dete	action	
TEST186-EC721CA	V0311	1	Incoming	7/28/2019 10:09:29 PM		Visitors		Motion Dete	action	
TEST186-EC721CA	13014Y	1	Incomina	7/28/2019 10:09:29 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	A112KWV	1	Incomina	7/28/2019 10:09:29 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	12LBN	1	Incoming	7/28/2019 10:09:28 PM		Visitors		Motion Dete	ection	
😨 TEST186-EC721CA	32X3FA	1	Incoming	7/28/2019 10:09:22 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	5277K11	1	Incoming	7/28/2019 10:09:17 PM		Visitors		Motion Dete	ection	
🗬 TEST186-EC721CA	V53VP4X	1	Incoming	7/28/2019 10:09:06 PM		Visitors		Motion Dete	ection	
🗬 TEST186-EC721CA	RV53VNX	1	Incoming	7/28/2019 10:09:06 PM		Visitors		Motion Dete	ection	
💇 TEST186-EC721CA	3G3FA1D	1	Incoming	7/28/2019 10:09:00 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	AF114GX	1	Incoming	7/28/2019 9:55:26 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	PKD4KXT	1	Incoming	7/28/2019 9:55:26 PM		Visitors		Motion Dete	ection	
TEST186-EC721CA	425GCDT	1	Incoming	7/28/2019 9:55:21 PM		Visitors		Motion Dete	ection	~
18589	9			<b>@</b> ) ∻ #		LICENSE_PLATE REGISTERED_ID NAME IDENTITY ADDRESS TICKET TEL_NUMBER E-MAIL MEMO ACTIVATION_DATE EXPIRATION_DATE VALID_CAMERA	T85899 1 GEOVISION OFFICE 0023145 12345678		GeoUision	lane a
						Log: 1-24, To	otal 102 reco	rd(s)		- /

Figure 4-2

For details, see Chapter 5 "Registered Plates Database" in GV-LPR User's Manual.



### 4.3 Database Synchronization

You can set up the Registered Plate Database in GV-LPR Center as the main database, and synchronize the Registered Plate Databases of the client GV-LPRs. You can update the selected or all Registered Plate Databases of the client GV-LPRs.

#### At the client GV-LPR site:

1. Click the **Network** button and select **Database Sync Server**. A message box pops up to display "*Do you want to ENABLE this process synchronously?*"





2. Click **Yes** to start. The Database Sync Server is started and then minimized to the notification area.



#### At the GV-LPR Center site:

- 1. Click the **Registered Plate Database Sync** button (No. 14, Figure 1-1) to start the server. It is minimized to the notification area.
- 2. Right-click the icon and select Synchronization Setting. This dialog box appears.

Synchro	nization setting	ļ					
Alias		Conn	ection 2			Ac	bt
Addres	ss	192.1	68.1.11			Edit	
Comm	hand Port	8550				Remove	
ID	Alias		Address		Port		
1	Connection 1		127.0.0.1		8550		
				Ľ		3	[

Figure 4-5



- 3. Type the name and IP address of the client GV-LPR.
- 4. The default Command Port is 8550. Keep the default value and make sure the Port is set the same at the client GV-LPR site.
- 5. Click **Add** and then click the **OK** button.
- Right-click the Database Sync Server icon in the notification area (see Figure 4-4), select Connect to synchronal server, and then select Start all or the desired client GV-LPRs to start the connection.
- 7. Right-click the Database Sync Server icon in the notification area (see Figure 4-4), and select **Manual synchronal refresh** to start synchronization.

**Note:** Currently, only new and edited information can be updated in the clients' databases. The information deleted at the GV-LPR Center site still remain in the database of the clients.