



GV-LPR Center

User's Manual V3.1





© 2009 GeoVision, Inc. All rights reserved.

Under the copyright laws, this manual may not be copied, in whole or in part, without the written consent of GeoVision.

Every effort has been made to ensure that the information in this manual is accurate. GeoVision is not responsible for printing or clerical errors.

GeoVision, Inc.
9F, No. 246, Sec. 1, Neihu Rd.,
Neihu District, Taipei, Taiwan
Tel: +886-2-8797-8377
Fax: +886-2-8797-8335
<http://www.geovision.com.tw>

Trademarks used in this manual: *GeoVision*, the *GeoVision* logo and *GV* series products are trademarks of GeoVision, Inc. *Windows* and *Windows XP* are registered trademarks of Microsoft Corporation.

July 2009

Contents

Chapter 1 Introduction	1
1.1 Overview	1
1.2 Assigning Cameras to View Pages	2
1.3 Viewing Camera Properties	3
1.4 Accessing Recognition Data	4
Chapter 2 Configuration	5
2.1 Center Listen Port Setting	5
Chapter 3 Remote Management	6
3.1 Starting Connection with the Clients	6
3.2 Remote Desktop	6
3.2.1 Transferring Files	7
Chapter 4 Database Management	8
4.1 Recognition Database	8
4.2 Registered Plate Database	9
4.3 Database Synchronization	10

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

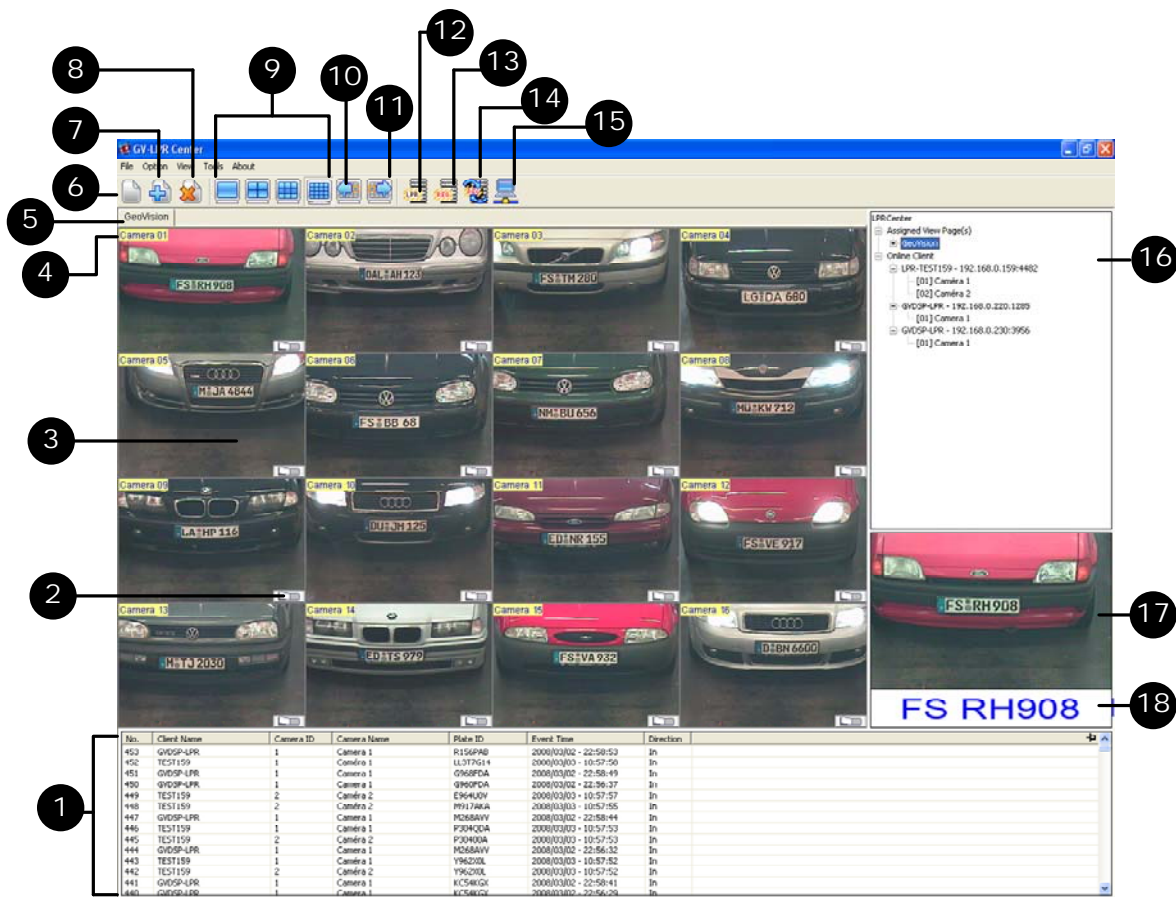


Figure 1-1

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

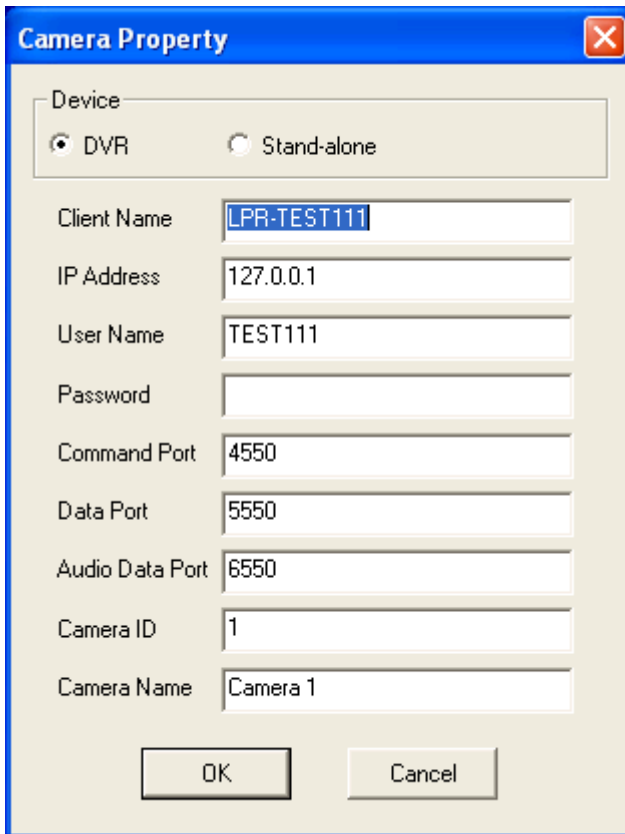
A View Page functions as a group, and you can group cameras from different GV-LPRs and GV-DSP LPRs on one View Page. On the View Page, you can view live images from the connected cameras. Up to 16 cameras can be assigned to one View Page, and the cameras can be repeatedly assigned to different Pages.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



The image shows a 'Camera Property' dialog box with a blue title bar and a close button (X) in the top right corner. The dialog contains several fields and options:

- Device:** A group box containing two radio buttons: 'DVR' (selected) and 'Stand-alone'.
- Client Name:** A text field containing 'LPR-TEST111'.
- IP Address:** A text field containing '127.0.0.1'.
- User Name:** A text field containing 'TEST111'.
- Password:** An empty text field.
- Command Port:** A text field containing '4550'.
- Data Port:** A text field containing '5550'.
- Audio Data Port:** A text field containing '6550'.
- Camera ID:** A text field containing '1'.
- Camera Name:** A text field containing 'Camera 1'.

At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Figure 1-2

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

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.



The dialog box titled "Recognition Data" displays the following information:

- Recognition Image:** A top-down view of a white car with license plate L 702 XHR. Below the image, the recognized license plate is **71D2XG** with a confidence score of **| 88 | 18 | 45 | 91 | 92 | 38 |**.
- Overview Grid:** A 2x3 grid of thumbnail images labeled Overview-1 through Overview-6. Overview-1 shows the car, while the others are empty.
- Client Information:**
 - Client Name: TEST186-EC721CA
 - Camera ID: 1
 - Camera Name: Camera 1
 - Direction: in
 - Event Time: 2019/07/28 - 21:52:18
- Registered Plates Data:**
 - LICENSE_PLATE
 - REGISTERED_ID
 - NAME
 - IDENTITY
 - ADDRESS
 - TICKET
 - TEL_COUNTRY_CODE
 - TEL_NUMBER
 - E-MAIL
 - PHOTO_PATH1
 - MEMO
 - ACTIVATION_DATE
 - EXPIRATION_DATE
 - VALID_CAMERA

GeoVision Inc.

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.

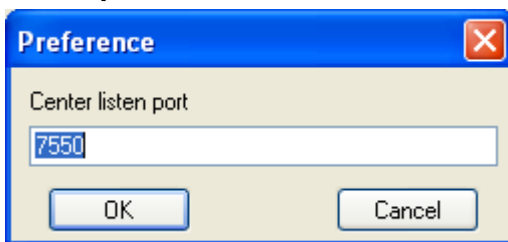


Figure 2-1

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**.

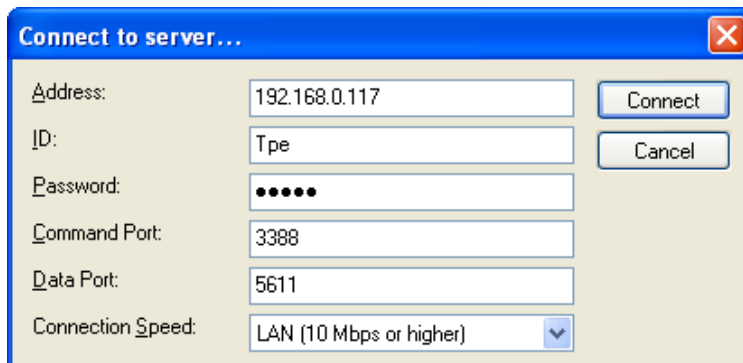



Figure 3-1

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.
5. 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).

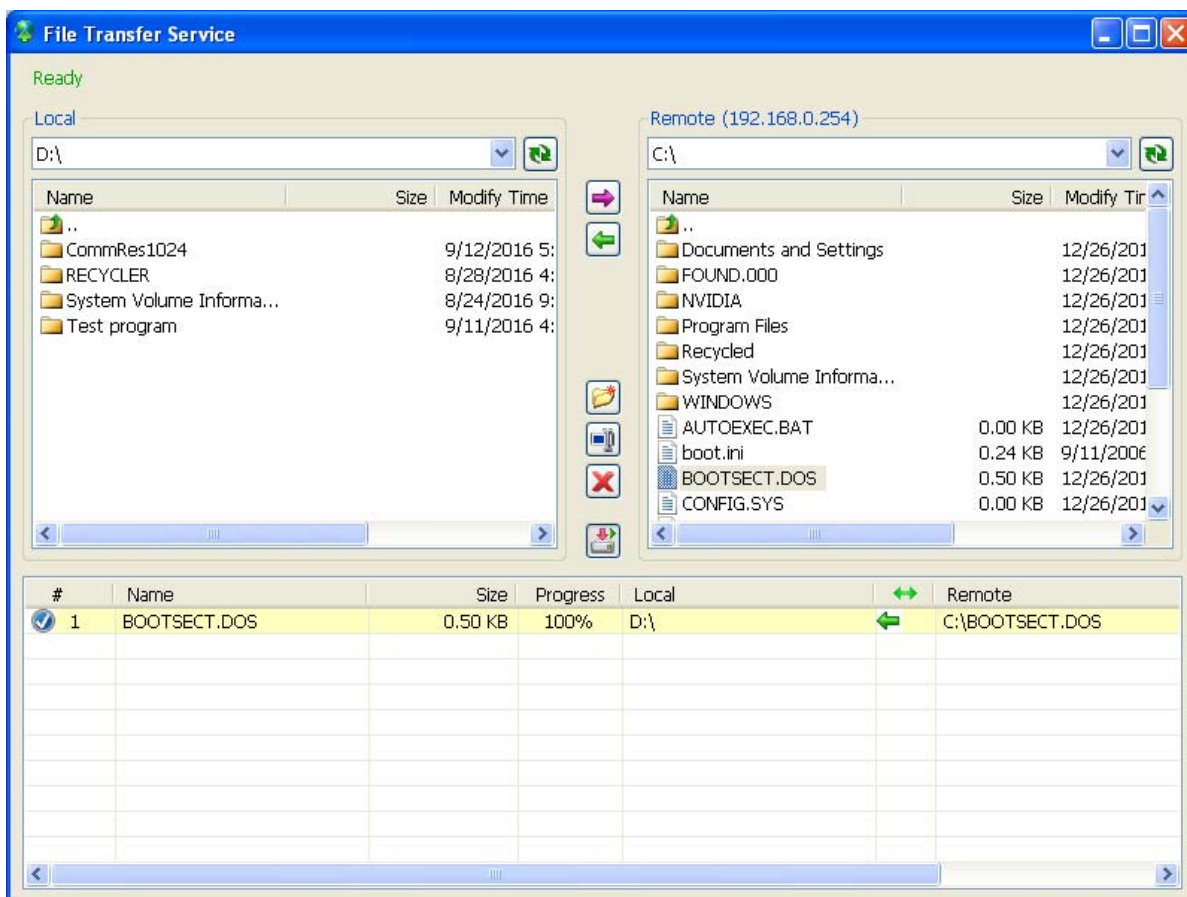


Figure 3-2

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

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 operator 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.

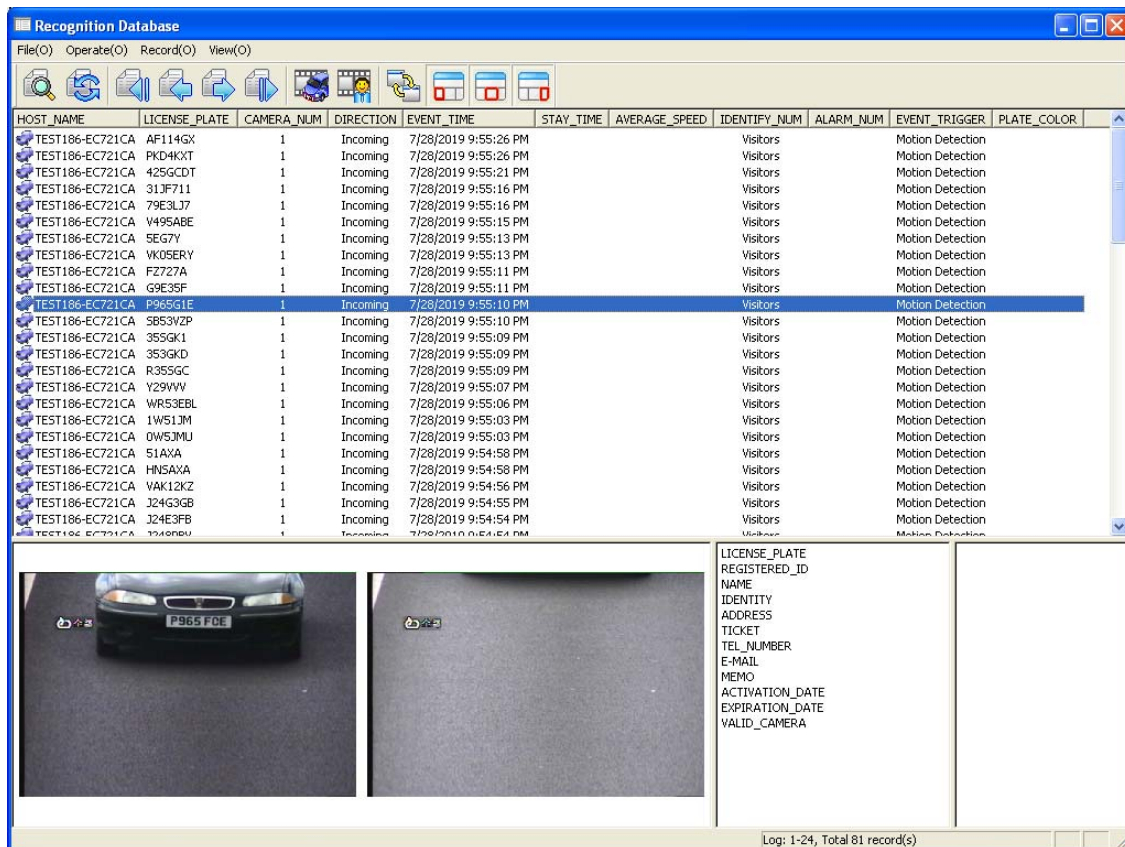


Figure 4-1

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.

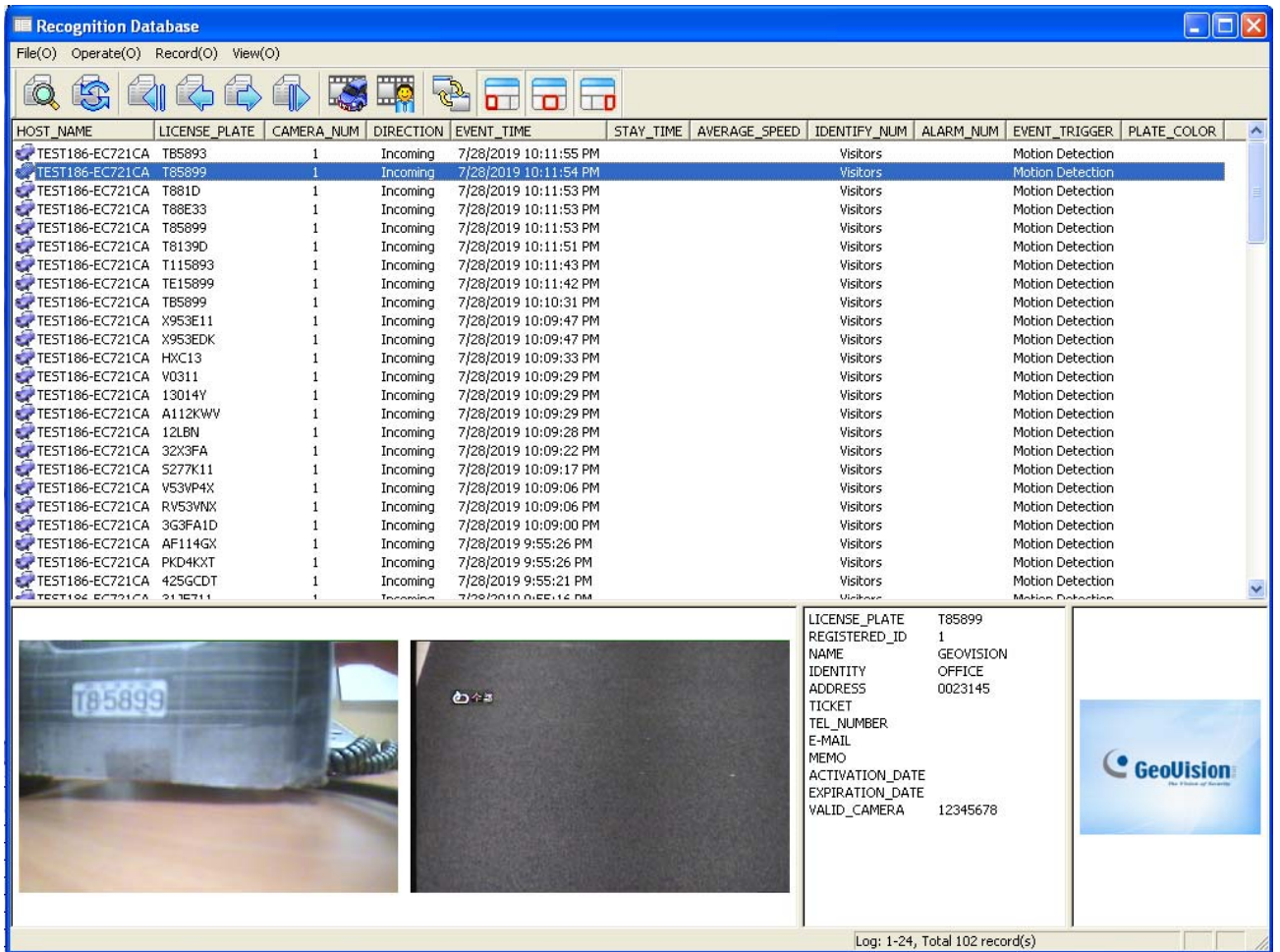


Figure 4-2

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?”

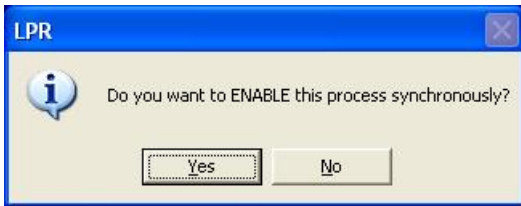


Figure 4-3

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



Figure 4-4

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.

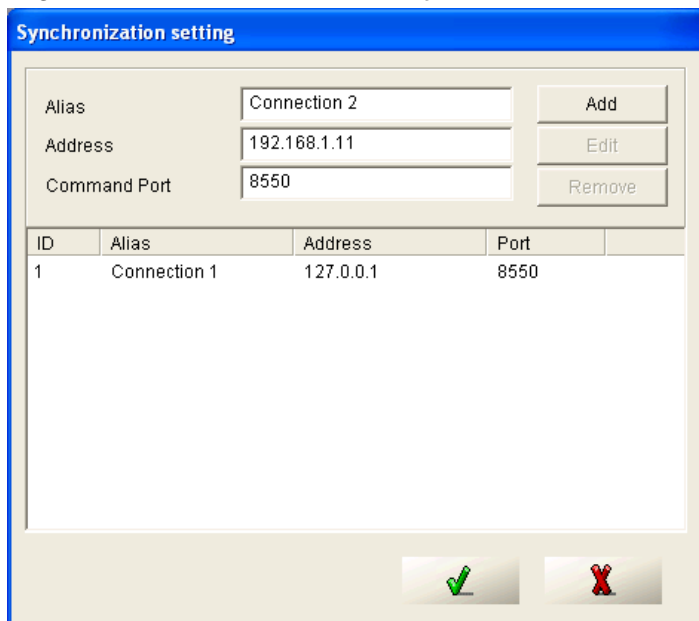


Figure 4-5

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.
6. 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.
