



VLP Processor Installation Guide

DECEMBER 2021

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Document History

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MN007808A01-AB	The following section is added for this release: <ul style="list-style-type: none"> • Adding Cameras on page 14 The following sections are updated for this release: <ul style="list-style-type: none"> • UbuntuHD Control Setup on page 10 • VPN Configuration on page 20 • WebUI Setup on page 25 	July 2021
MN007808A01-AC	The following sections are updated for this release: <ul style="list-style-type: none"> • WebUI Setup on page 25 • TAS for WebUI Setup on page 40 	December 2021

Read Me First

Notations Used in This Manual

Throughout the text in this publication, you notice the use of **Warning**, **Caution**, and **Notice**. These notations are used to emphasize that safety hazards exist, and the care that must be taken or observed.



WARNING: An operational procedure, practice, or condition, and so on, which may result in injury or death if not carefully observed.



CAUTION: An operational procedure, practice, or condition, and so on, which may result in damage to the equipment if not carefully observed.



NOTE: An operational procedure, practice, or condition, and so on, which is essential to emphasize.

Special Notations

The following special notations are used throughout the text to highlight certain information or items:

Table 1: Special Notations

Example	Description
Menu key or Camera button	Bold words indicate a name of a key, button, or soft menu item.
The display shows <code>Settings Applied</code> .	Typewriter words indicate the MMI strings or messages displayed.
<code><required ID></code>	The courier, bold, italic, and angle brackets indicate user input.
Setup → Settings → All Settings	Bold words with the arrow in between indicate the navigation structure in the menu items.

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Chapter 1

UbuntuHD Control Setup

1.1

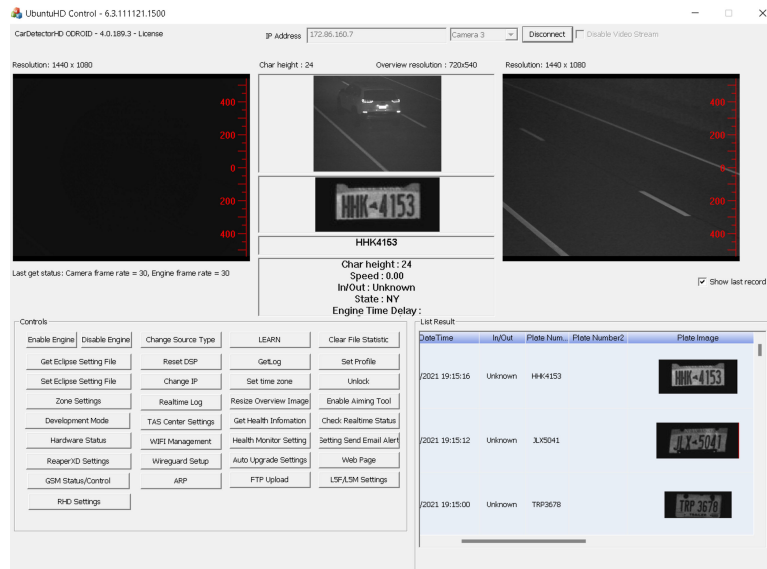
UbuntuHD Control Overview

UbuntuHD Control (also known as MiniControlCenter) is a Windows app for controlling, configuring, and troubleshooting VLP camera systems with Motorola Solutions' ReaperHD ,L5F, or L5M LPR cameras. UbuntuHD Control can also be used with third party ONVIF compatible IP LPR cameras.



NOTE: L5Q standalone cameras do not use a VLP and are not compatible with VLP based camera systems. For L5Q cameras, see [L5Q Provisioning Leaflet](#) and the [L5Q Installation Guide](#).

Figure 1: UbuntuHD Control Main Window Overview



To use it, you need to have the following:

- An Ethernet or Wi-Fi enabled 64-bit Windows 10 PC.
- The UbuntuHD Control software.
- An assembled and powered VLP based camera system.
- One Ethernet cable.
- A ReaperHD, L5F, L5M, or other ONVIF compatible IP camera.

There are three ways to connect the UbuntuHD Control software to a VLP:

- Ethernet cable.
- Wi-Fi hotspot.
- Over the Internet through a VPN.

To configure a VPN connection for the VLP, refer to the [VPN Configuration on page 20](#) section.

1.2

Downloading the UbuntuHD Control Software

Procedure:

- 1 Download the UbuntuHD Control software from the following link: <https://get.vaasfiles.com/VLPMCC>



NOTE: The UbuntuHD Control software is also included in the CarDetector Mobile and CarDetector Fixed software packages.

1.3

Connecting over Ethernet

Procedure:

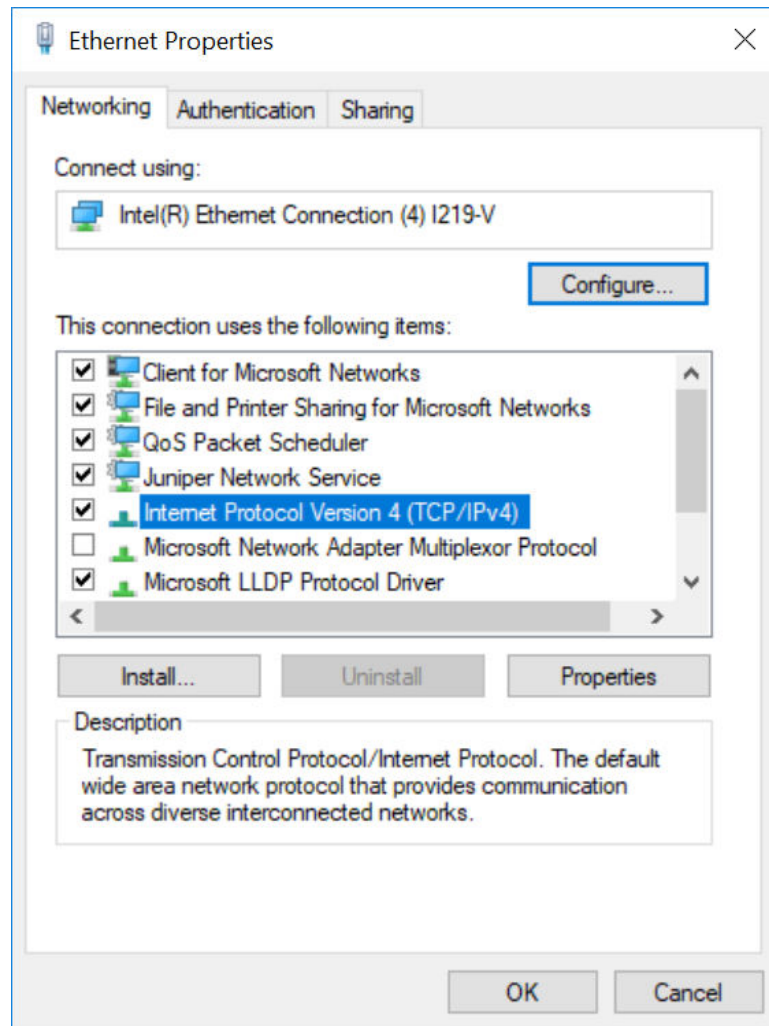
- 1 Connect a Windows PC to the LAN 1 port on the VLP with an Ethernet cable.



NOTE: The LAN 2 Ethernet port on the VLP is configured for DHCP and can be used to connect the VLP to a DHCP/Internet enabled router. When using this configuration, connect the Windows PC to the router instead and use the IP address assigned to the VLP by the router to connect to UbuntuHD Control.

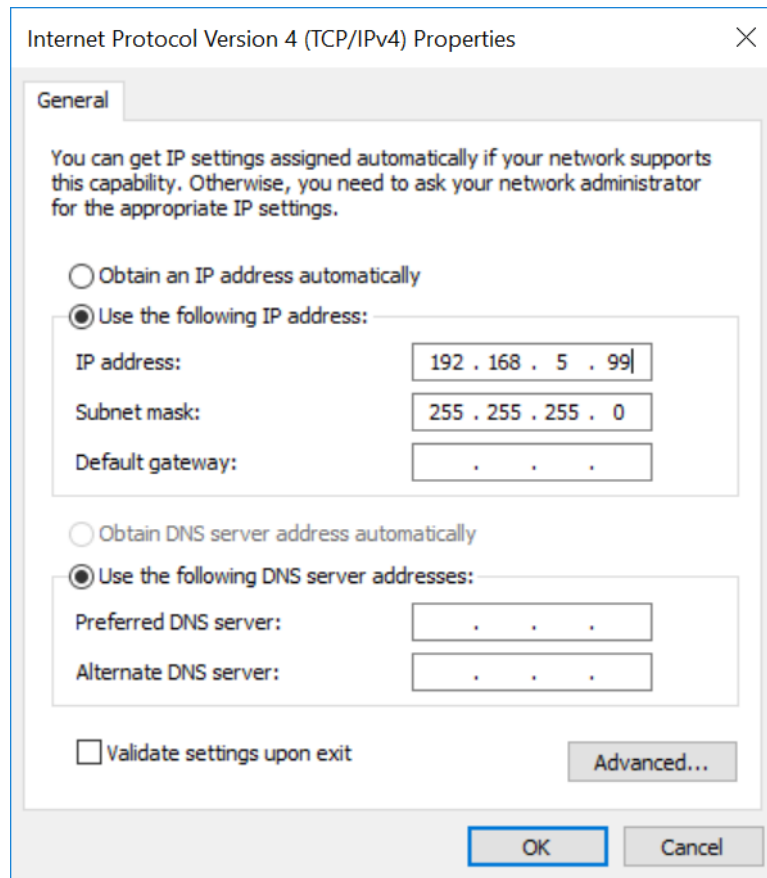
- 2 Configure the IP Address of the Windows PC in network settings:
 - a Open the **Windows Control Panel** and click **Network and Internet**→**Network and Sharing Center****Change Adapter Settings**.
 - b Right-click the **Ethernet** adapter and click **Properties**.

Figure 2: Ethernet Properties



- c Double-click **Internet Protocol Version (TCP/IPv4)** and select the **Use the following IP address** radio button.
- d Enter the following IP address information:
 - IP address: 192.168.5.99
 - Subnet mask: 255.255.255.0

Figure 3: Internet Protocol Version (TCP/IPv4) Properties



- e To save, click **OK**.

1.4

Connecting to the Wi-Fi Hotspot

Most VLP Units come equipped with a built in Wi-Fi adapter broadcasting a hidden Wi-Fi Access Point. This AP can be used to connect to a VLP with the default SSID and Password (Key) when an Ethernet connection is not available.

Procedure:

- 1 From the Windows system tray, click **Wi-Fi**→**Wi-Fi name Hidden Network**→**Connect**.
- 2 In the **Enter the name (SSID) for the network** text field, enter the default VLP SSID: **VLP-COMMS**.
- 3 Enter the VLP's default Wi-Fi key: **7tM&L1G!b**. Or, enter the key generated from step [step 6](#) and click **Next**.
- 4 Open the UbuntuHD Control software.
- 5 In the IP address field at the top of the window, enter the default IP of the VLP's Wi-Fi adapter: 10.42.0.1. Select a connected camera, and then click **Connect**.

Figure 4: Wi-Fi IP Address



The video streams from the selected camera appears.

1.5

Launching UbuntuHD Control

Procedure:

- 1 On the Windows PC, open the UbuntuHD Control software zip file and extract the contents into a new folder.
- 2 Double-click the **UbuntuHDControl.exe** file to launch the software.
- 3 In the IP address field at the top of the window, enter the default IP address for the VLP's LAN 1 Ethernet adapter: 192.168.5.150.



NOTE: If using the LAN 2 Port with DHCP, use the IP address assigned to the VLP instead.

Figure 5: VLP Ethernet Adapter IP Address

IP Address Camera 3

- 4 Select a connected camera and click **Connect**.

The video streams from the selected camera will appear.

1.6

Adding Cameras

When and where to use: To configure ReaperHD, L5F and L5M cameras connected to a VLP system, configure the cameras with the Change Source Type menu.

Procedure:

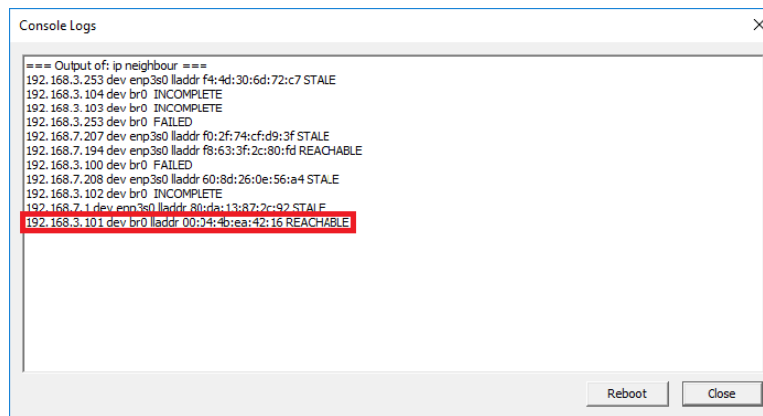
- 1 Select the camera to be added with the camera drop-down menu and click **Connect**.

Figure 6: Select Camera

IP Address Camera 1

- 2 To view the IP addresses of devices connected to the VLP, select the **ARP** (Address Resolution Protocol) button.

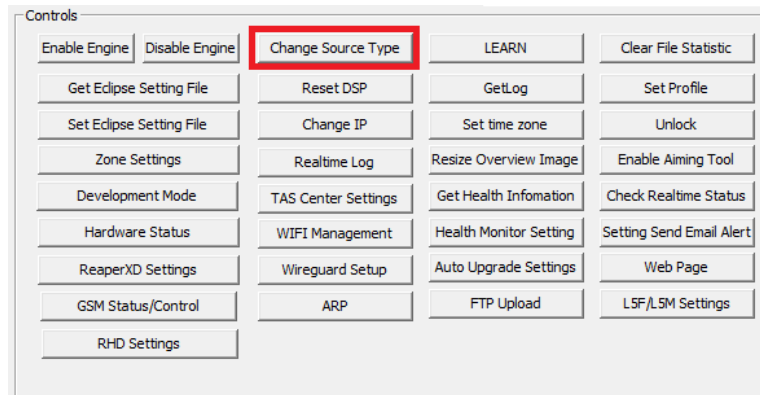
Figure 7: Address Resolution Protocol



NOTE: By default, ReaperHD, L5F, and L5M cameras have an IP address assigned as 192.168.3.101 - 192.168.3.104.

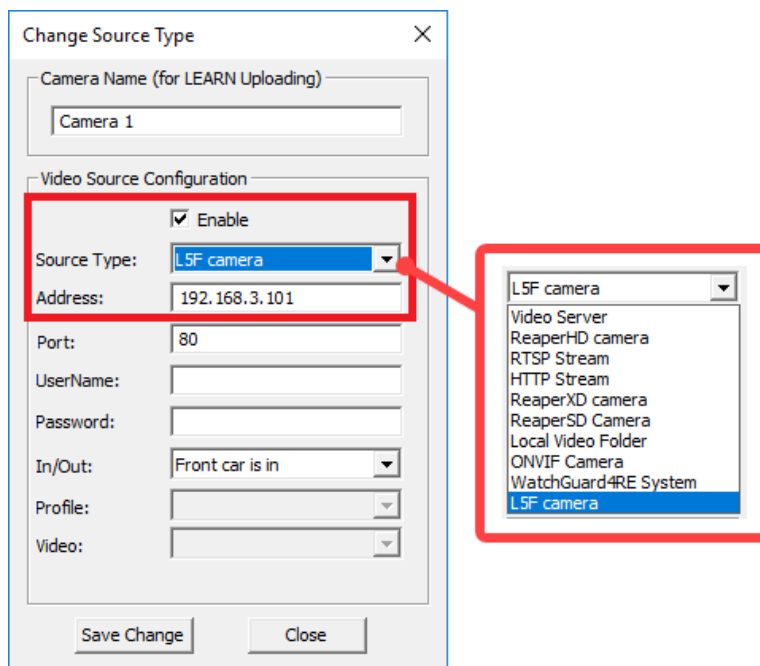
- 3 Look for the devices with IP addresses of the form 192.168.3.1XX with the **REACHABLE** state. These are cameras connected to the PoE ports on the VLP.
- 4 Select **Change Source Type**.

Figure 8: Change Source Type



- 5 Check the **Enable** check box.
- 6 Select the camera type from the **Source Type** drop-down menu.

Figure 9: Select Camera in Change Source Type



- 7 Enter the IP address of the camera into the **Address** field.
- 8 Select **Save Change**.
The video streams from the camera should now appear in the main window.
- 9 Repeat this process for the other cameras in the system with their respective IP addresses from the **ARP** window.

For ReaperHD, L5F L5M cameras, only the **Address** and **Source Type** fields need to be configured. The other fields can be left blank. For reference, see the following table for descriptions of the other fields.

Table 2: Change Source Type Fields Description

Field	Description
Camera Name	The identifier that the camera will be referred to as in LEARN. (Used only as a label. Does not determine the selected camera.)
Source Type	This drop-down is used to select the camera or stream type for the video feed.
Address	The IP Address to connect to for the currently selected camera.
Port	The port associated with the camera or stream. Default is the HTTP port 80. Other commonly used ports are: RTSP: 554 and HTTPS: 443 for other camera types.
Username/Password	Login credentials for the selected camera can be entered here if required. ReaperHD and L5F/L5M cameras do not require credentials by default.
In/Out	Designates this camera in PlateSearch as monitoring the entrance or exit of a location.
Profile	Specify a desired camera profile name here if needed. By default, this can be left blank.
Video	Fill in this field if using a video server.

1.7

Configuring Wi-Fi Hotspot Mode

The VLP's Wi-Fi Access Point can be configured to change the default SSID and password.

When and where to use: To connect to the VLP using the default SSID and password, see [Connecting to the Wi-Fi Hotspot on page 13](#).

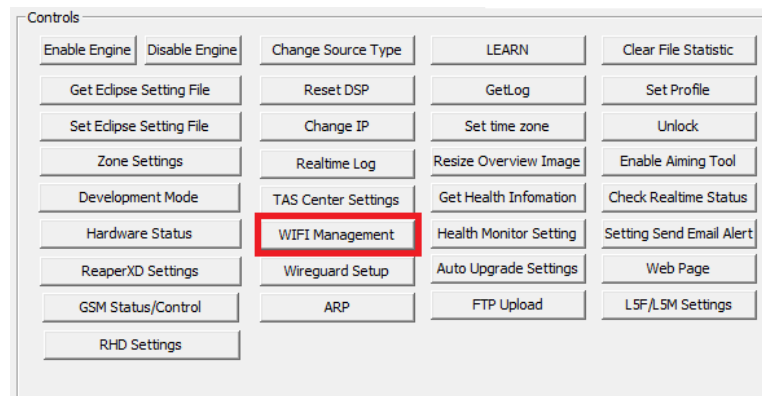


NOTE: Some early VLP versions do not have built-in Wi-Fi capability. These VLP units will not broadcast a hidden Wi-Fi network and will not show the 'VLP-COMMS' SSID entry in the Wi-Fi management window. Such systems will need a CradlePoint router to provide a Wi-Fi Access Point. For consistency, setup the AP on the CradlePoint router using the same default settings as the VLP: (SSID: VLP-COMMS, Key: 7tM&L1G!b).

Procedure:

- 1 From the **Controls** section, click **Wi-Fi Management**.

Figure 10: Wi-Fi Management

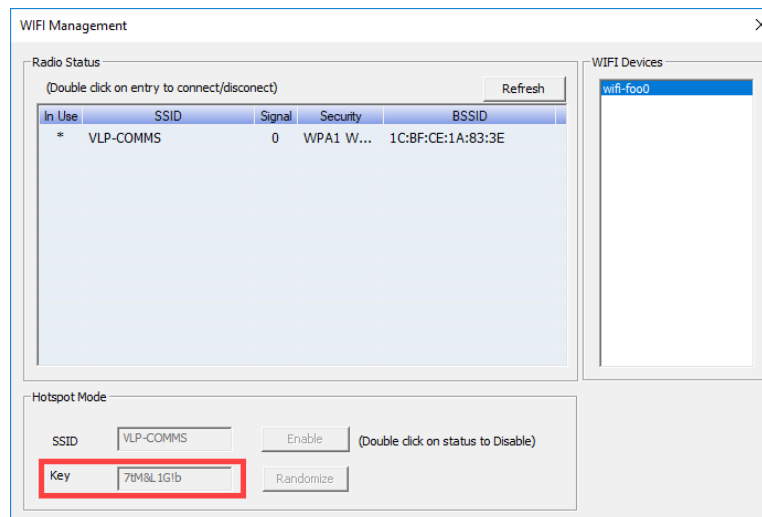


- 2 To change the SSID or Wi-Fi password , double-click the **VLP-COMMS** entry in the **Radio Status** box and click **OK** to disconnect the hotspot.
- 3 Enter a new SSID and Wi-Fi Key (password) if desired.
- 4 Copy the text in the **Key** field.
- 5 To randomly generate a secure key, click the **Randomize** button.
- 6 In the **Wi-Fi Management** window, copy the randomized characters from the **Key** text box as reference.



NOTE: The Wi-Fi hotspot SSID and password can be changed from this window.

Figure 11: Wi-Fi Management



- 7 To enable the Wi-Fi hotspot click **Enable**.
- 8 To change the SSID or password, double-click the "VLP-COMMS" entry in the **Radio Status** box and click **OK** to disconnect the hotspot.
- 9 Enter the new SSID or password and click **Enable**.

1.8

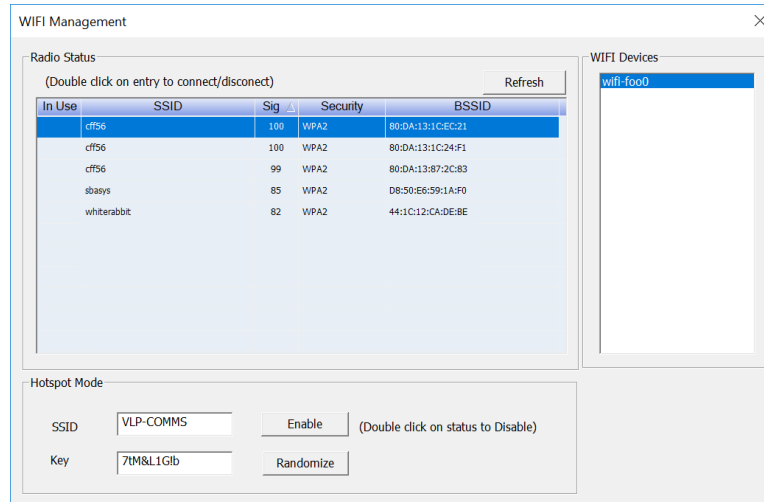
Connecting the VLP to a Wi-Fi Network

Instead of operating in hotspot mode, the VLP can also be configured to join another Wi-Fi network to provide it with Internet access.

Procedure:

- 1 In the **Wi-Fi Management** window, double-click the **VLP-COMMS** entry in the **Radio Status** section.

Figure 12: Wi-Fi Management-Radio Status



- 2 To disable the Wi-Fi hotspot, on the resulting confirmation window, click **OK**.
- 3 To display a list of available Wi-Fi hotspots, click **Refresh**.
- 4 To connect to a Wi-Fi network, double-click on the desired entry.
- 5 Enter the password for the Wi-Fi network and click **OK**.

1.9

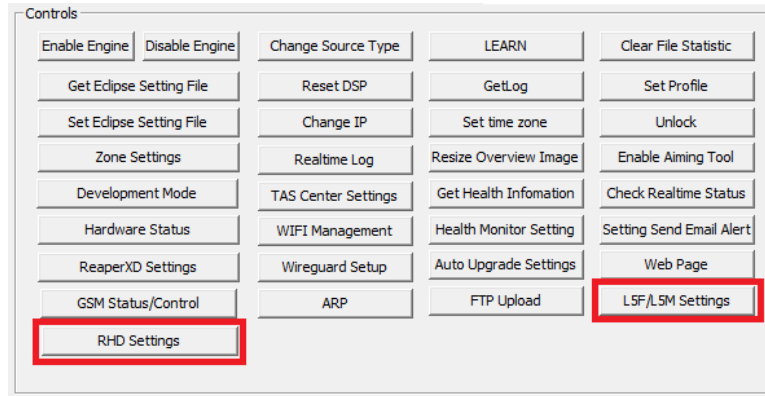
Inverting the Camera Feed

When and where to use: If the mounting configuration requires the camera to be installed upside down, the video feed can be inverted.

Procedure:

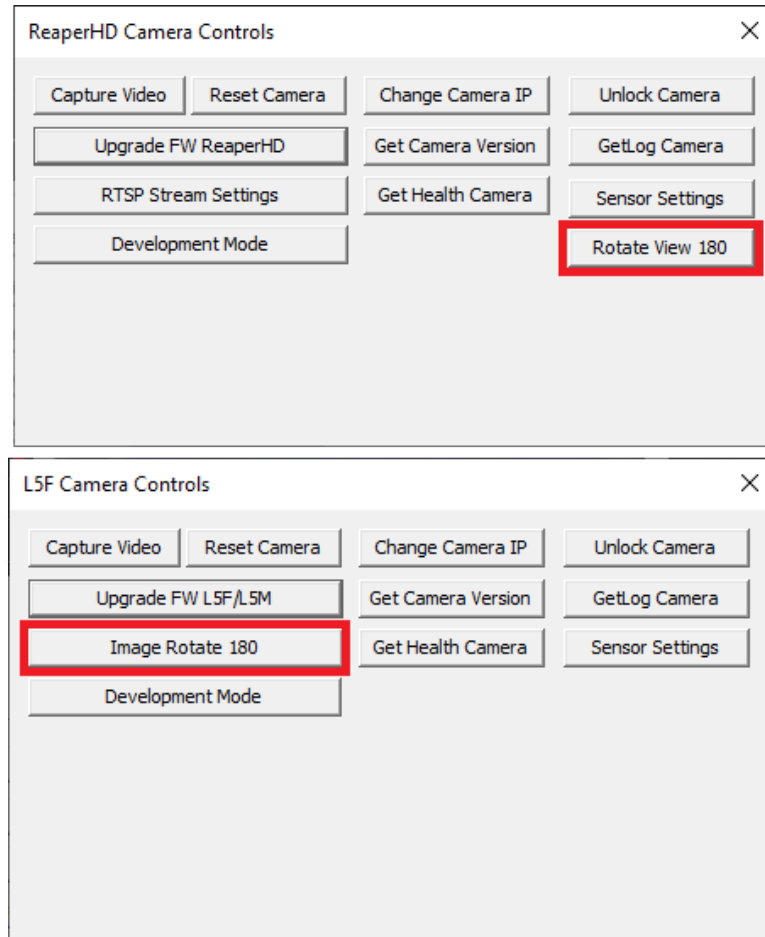
- 1 Select the correct camera.
- 2 Perform one of the following actions:
 - For ReaperHD cameras, select **RHD Settings**.
 - For L5F/L5M cameras, select **L5F/L5M Settings**.

Figure 13: Select Type of Camera Settings



3 Select Rotate View 180.

Figure 14: Camera Settings



Chapter 2

VPN Configuration

VLP systems can be configured to connect to a Virtual Private Network (VPN) with the UbuntuHD Control software to enable remote access over the Internet.

2.1

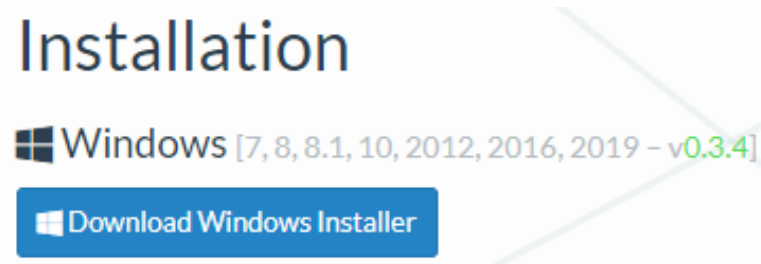
Downloading the WireGuard VPN Software


WireGuard is a lightweight VPN client software used to connect to the VLP over a VPN connection from a remote Windows PC.

Procedure:

- 1 Open a web browser and connect to the WireGuard website at <https://www.wireguard.com/install/>.
- 2 Click the **Download Windows Installer** link.

Figure 15: Download Windows Installer



 **NOTE:** Using WireGuard with other Operating Systems to connect to a VLP is possible but not currently supported.

- 3 To run the WireGuard installer, double-click on the installer file.
The WireGuard application will open automatically when the installation is complete.

2.2

Configuring WireGuard in UbuntuHD Control

Procedure:

- 1 Open **UbuntuHD Control**→**Enter an IP address**→**Camera**→**Connect** to connect to the VLP.


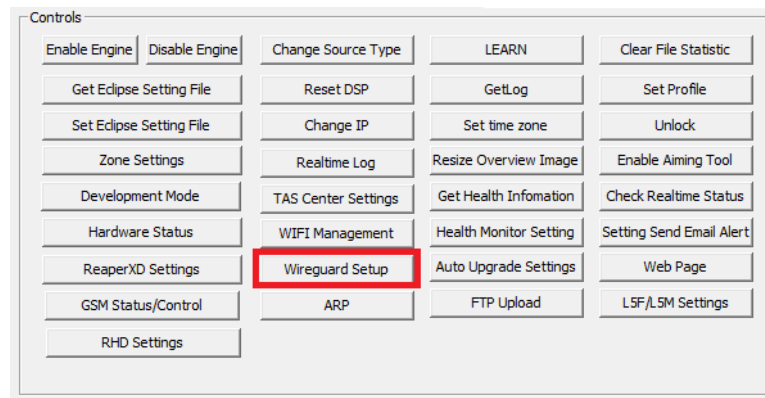
 **NOTE:** The default local IP address for the VLP's LAN 1 Ethernet port is 192.168.5.150.

Figure 16: Connecting to the VLP



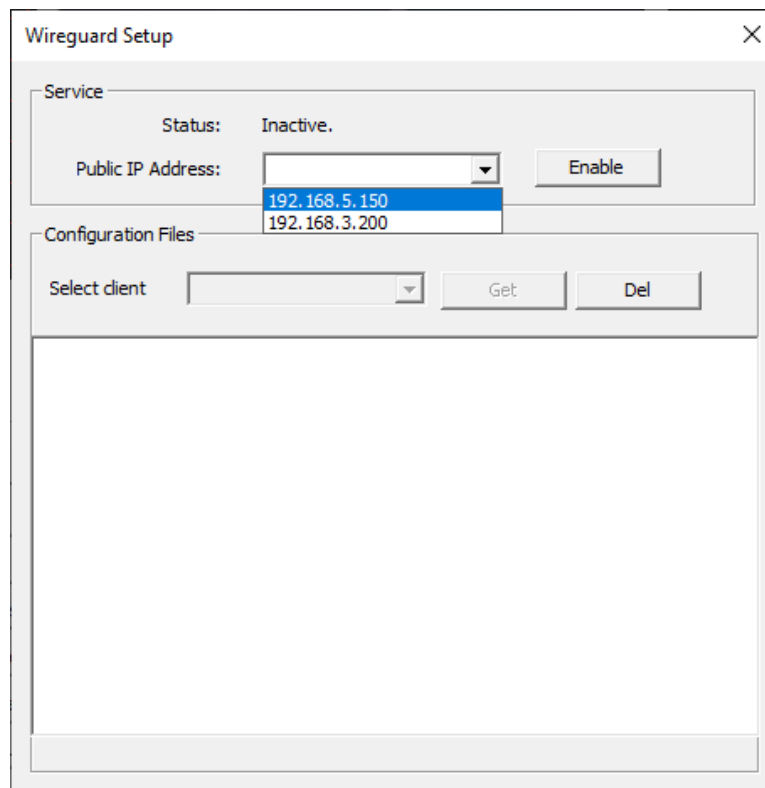
- 2 Click the **WireGuard Setup** button.

Figure 17: WireGuard Setup



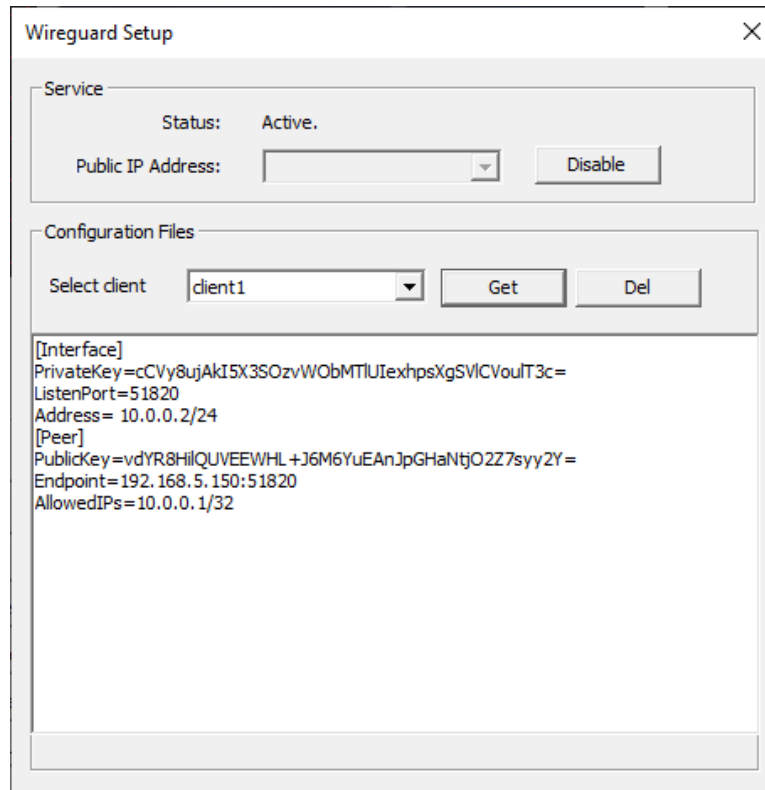
- 3 In the **WireGuard Setup** window, select the Public IP address of the VLP and click **Enable**.

Figure 18: WireGuard Public IP Address



- 4 In the **Select Client** drop down menu, select the client being configured and click **Get**.

Figure 19: WireGuard Select Client



- 5 Highlight the text that appears in the lower portion of the window and copy the text with **Ctrl+C**.



NOTE: You can configure up to three VPN clients. For only one client, leave the first default **client1** selected.

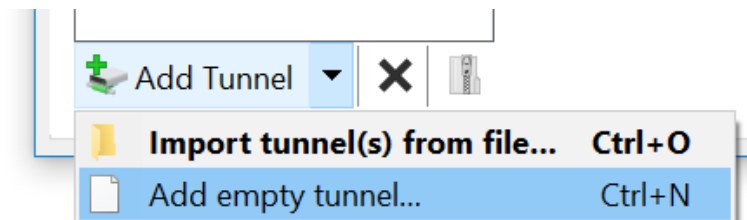
2.3

Configuring WireGuard

Procedure:

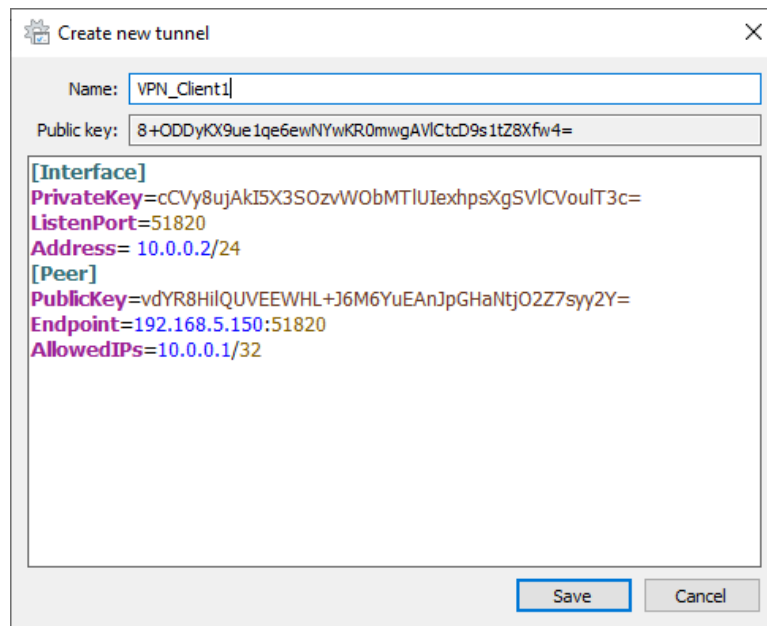
- 1 Open the **WireGuard** window.
- 2 Click the down-arrow next to **Add Tunnel** at the bottom of the window and click **Add Empty Tunnel**.

Figure 20: Add Tunnel



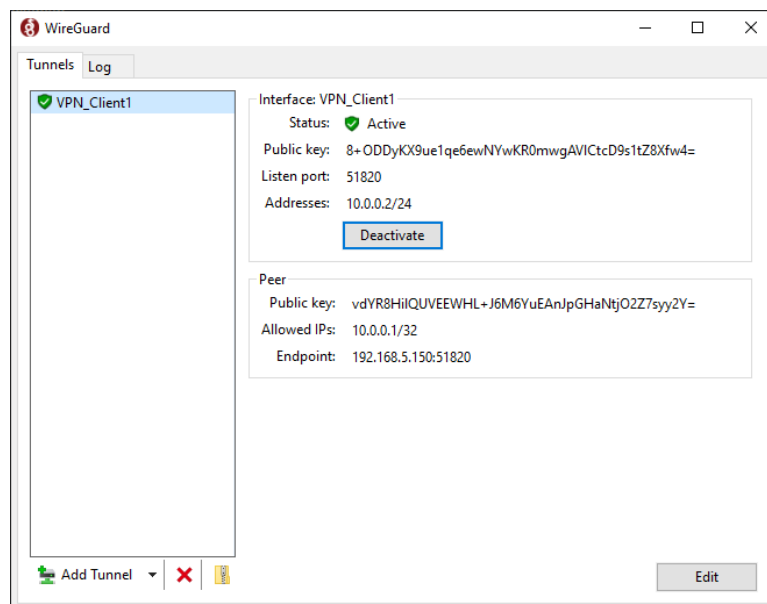
- 3 In the **Create new tunnel** window that opens, enter a name for the tunnel connection in the **Name** field.
- 4 Delete the existing text in the lower text window and press **Ctrl+V** to paste the text copied earlier from the WireGuard Setup window.
- 5 Click **Save**.

Figure 21: Create New Tunnel



- 6 To connect WireGuard to the VLP VPN, click **Activate**.

Figure 22: Connect WireGuard to VLP VPN



If the connection is successful, the Status will change to Active. A Windows notification window will also appear.

2.4 Testing the VPN Connection

Procedure:

- 1 In Windows, open a **Command Prompt** window.

2 Type "ping 10.0.0.1" and press **Enter**.

If the VPN connection to the VLP is active and configured correctly, ping replies from the VLP appears. Type **http://10.0.0.1** into a web browser to access the VLP WebUI from the new tunneled Public IP.



NOTE: If using the client2 or client3 profile in the WireGuard Setup window use 10.0.0.3 and 10.0.0.4 respectively to test on the VPN tunnel connections.

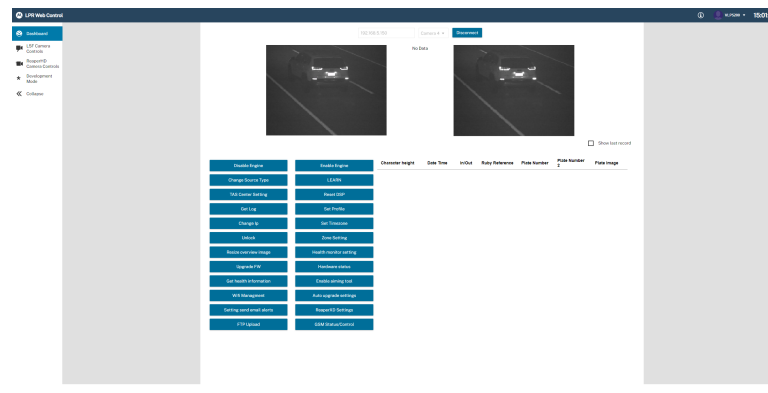
Chapter 3

WebUI Setup

The VLP WebUI is a web-based version of the UbuntuHD Control Windows software. It runs directly on the VLP and can be accessed by any computer that has a web browser and a LAN or Internet connection without the need to download and run the UbuntuHD Control software.

This section describes some of the more common tools and configuration options available for WebUI setup.

Figure 23: WebUI Main Page



3.1

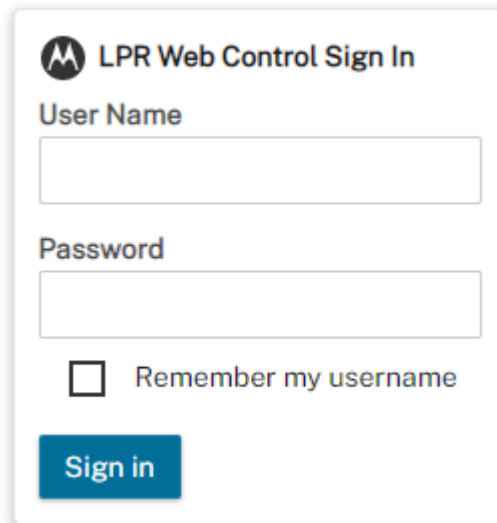
Logging In to the WebUI

Prerequisites: Connecting to a remote VLP requires an active VPN connection. Refer to [VPN Configuration on page 20](#) for instructions on connecting to a remote VLP unit. Refer to UbuntuHD Control Setup for instructions on connecting to the VLP over a local LAN connection.

Procedure:

- 1 Open a web browser window and enter the IP address of the VLP into the address bar.
- 2 Enter the following default WebUI login credentials:
 - Username: VLP5200
 - Password: Moto4ever!

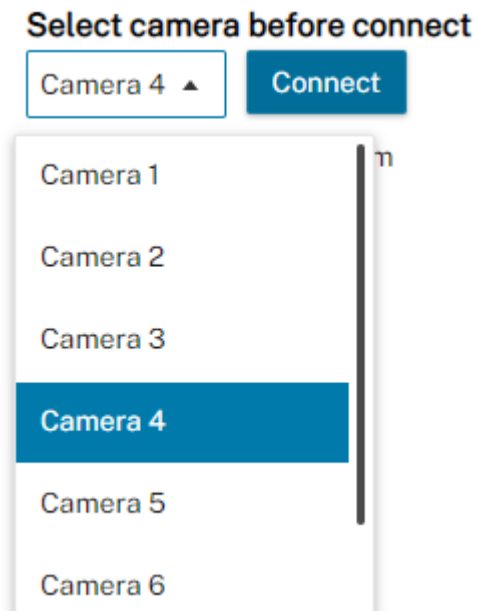
Figure 24: LPR Web Control Sign In



The image shows a sign-in form titled "LPR Web Control Sign In". It features a logo on the left, followed by the title. Below the title are two input fields: "User Name" and "Password". Under the "Password" field is a checkbox labeled "Remember my username". At the bottom of the form is a blue button labeled "Sign in".

- 3 Select the desired camera and click **Connect**.

Figure 25: Select Camera



The image shows a user interface for selecting a camera. At the top, it says "Select camera before connect". Below this is a dropdown menu currently showing "Camera 4" with a small upward arrow. To the right of the dropdown is a blue button labeled "Connect". Below the dropdown is a list of camera options: "Camera 1", "Camera 2", "Camera 3", "Camera 4", "Camera 5", and "Camera 6". "Camera 4" is highlighted with a blue background. A vertical scrollbar is visible on the right side of the list.

If the selected camera is connected, the IR and Color video feeds will appear.

3.2 VLP Controls Overview

This section contains configuration and diagnostic tools for the VLP unit.

Figure 26: VLP Controls



3.2.1 Enabling or Disabling Engine

Procedure:

- 1 To start or stop the Optical Character Recognition engine (license plate detection) on the VLP while troubleshooting or testing, use the **Enable/Disable Engine** buttons.

Figure 27: Enable/Disable Engine



NOTE: The OCR engine is enabled by default.

3.2.2

Configuring Zone Settings

Capture zones allow you to mask off sections of the camera stream that should not be captured and highlight areas that are more likely to have license plates in them.

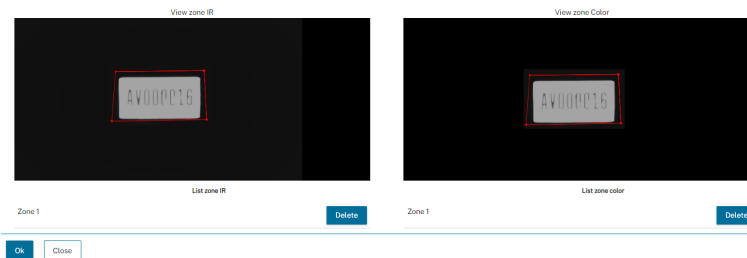
Procedure:

- 1 To create capture zones for the IR and Color camera streams, use the **Zone Settings** menu.



NOTE: License plate detection will only occur inside the capture zone border.

Figure 28: Zone Setting



- 2 To start a capture zone border line, click on a camera feed.
- 3 Click on another point on the camera feed to complete each border line.
- 4 Continue clicking to form the border of the capture zone.
- 5 After creating at least two lines, click the starting point to complete the capture zone.

3.2.3

Upgrading Firmware

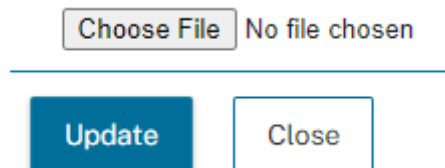
Procedure:

- 1 Download the latest VLP firmware from: <https://sites.google.com/motorolasolutions.com/vaas-software>.
- 2 To install a new firmware version onto the VLP, use the **Update Engine** menu.



NOTE: Only use valid firmware files received from Motorola Solutions or vaasfiles.com to update firmware.

Figure 29: Update Engine



- 3 Click the **Browse** button locate the file and click **Update** to install the Firmware.
- 4 Wait for the Firmware Install process to complete before closing the browser window. When complete, the VLP will restart.



NOTE: Do not interrupt power or turn the VLP off during the firmware update!

3.2.4 Changing Source Type

Procedure:

To configure the connection and login information for the camera currently selected at the top of the WebUI main window, use the **Change Source Type** menu.

Figure 30: Change Source Type

Camera Name (for LEARN Uploading)
Camera 4

Video Source Configuration
 Enable

Source type
L5F camera

Address
192.168.3.104

Port
80

Username

Password

In/Out
Front Car Is In

Profile

Video

Save Change Close

Following are the description for each field:

Table 3: Change Source Type Fields Description

Field	Description
Camera Name	The identifier that the camera will be referred to as in LEARN.
Source Type	This drop-down is used to select the camera or stream type for the video feed.
Address	The IP Address to connect to for the currently selected camera. By default for ReaperHD cameras, the number in last octet corresponds with the camera number selected in the WebUI main window (192.168.3.101 - .108)
Port	The port associated with the camera or stream. Default is the HTTP port 80. Other commonly used ports are: RTSP: 554 and HTTPS: 443 for other camera types.
Username/Password	Login credentials for the selected camera can be entered here if required. ReaperHD and L5F/L5M cameras do not require credentials by default.

Field	Description
In/Out	Designates this camera in PlateSearch as monitoring the entrance or exit of a location.
Profile	Specify a desired camera profile name here if needed. By default, this can be left blank.
Video	Fill in this field if using a video server.

3.2.5

Resetting DSP

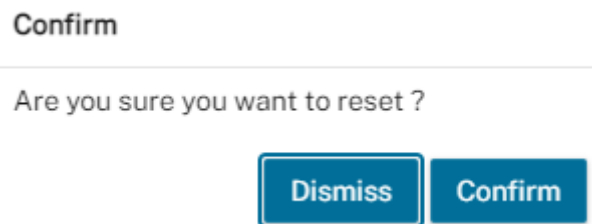
Procedure:

- 1 To perform a hardware reboot of the VLP, use the **Reset DSP** button.
- 2 Click **Yes** in the confirmation window and the VLP will reset.



NOTE: The WebUI will disconnect until the VLP resets. Refresh the browser window if the WebUI does not load.

Figure 31: Reset Confirmation



- 3 Upon reboot, click **Connect** to reconnect to the VLP.

3.2.6

Changing IP

Procedure:

To modify the IP addresses of the VLP's two network adapters, use the **Change IP** button.

By Default,

- **eno1** is the adapter for the LAN 1 Ethernet port (192.158.5.150).
- **br0** is the adapter for the LAN 3-10 PoE ports (192.168.3.200).
- The Wi-Fi adapter's IP address is 10.42.0.1.

By default, ReaperHD cameras connected to the VLP's PoE ports are on the <192.168.3.xxx> subnet.

Figure 32: Change IP

Table 4: Change IP Interface Information

Field	Description
IP Address	The desired IP address for the currently selected adapter.
Subnet Mask	Subnet mask for the entered IP address.
Default Gateway	By default, this field can be left blank.
Preferred DNS Server	By default, this field can be left blank.
Alternate DNS Server	By default, this field can be left blank.

3.2.7

Configuring Wi-Fi Management

Use the Wi-Fi Management window to configure the Wi-Fi adapter of the VLP. The VLP can be configured as a Wi-Fi hotspot to connect to for remote access, or it can connect to other Wi-Fi hotspots for Internet or network access.

Procedure:

- 1 To connect to a Wi-Fi network, double-click on an entry in the Radio Status list and enter a password if required.

The Radio Status list shows available Wi-Fi hotspots to connect to.

The Wi-Fi Devices list shows any devices connected to the hotspot of the VLP.

Figure 33: Wi-Fi Management

The screenshot displays the Wi-Fi Management interface. It features a table titled "Radio Status" with columns for "In Use", "SSID", "Signal", "Security", and "BSSID". The table lists various wireless networks and their details. To the right, there is a "WiFi Devices" section with a button labeled "w1x5Mvaf4833e". Below the table, there is a "Refresh" button. At the bottom, there is a "Hotspot Mode" section with input fields for "SSID" (containing "VLP-COMMS") and "Key" (containing "7jMML10ib"), and buttons for "Disable" and "Randomize". A "Close" button is located at the bottom left of the hotspot mode panel.

In Use	SSID	Signal	Security	BSSID
	ebaysys	85	WPA2	D850E6591A40
	SBG8300-1C21	72	WPA2	84BB69682055
	SBG8300Guest-1C21	69	WPA2	866B69682025
	whitarabbit	65	WPA2	443C32CADEBE
	Nacho Wifi	62	WPA2	F4C134860508
	DIRECT 7C-HP OfficeJet 3830	62	WPA2	C465165CFE7D
	housewifi_EXT	59	WPA1 WPA2	CC32E5A8268C
	Hotel 1 California	59	WPA2	A87D5D9D5183
	NETGEAR19	55	WPA2	0836C9BA82A1
	NETGEAR28	55	WPA2	94A67E7ECC27
	Master-Guest	55	WPA2	9EC9EBEE9055
	housewifi	49	WPA1 WPA2	6632B1FB1A89

Double click on entry to connect/disconnect

WiFi Devices: w1x5Mvaf4833e

Refresh

Hotspot Mode

SSID: VLP-COMMS [Disable]

Key: 7jMML10ib [Randomize]

Close

- 2 To create a hotspot, enter a desired name for it into the SSID box and click **Enable**.
- 3 To create a password for the hotspot, enter the password into the Key box or click **Randomize**.

3.2.8

Configuring a LEARN Connection

Use the LEARN window to configure the VLP to upload LPR detections to LEARN.

Procedure:

- 1 If you have a LEARN .ini file, click **Get File** to select and install it.
- 2 To check if detections made by this system are recognized by Agency Hot Lists, toggle on **Enable Hot List**.




NOTE: When configuring users in LEARN, make sure all are configured before downloading the .ini file. Use only one .ini file per site. Only one user account per site is needed regardless of how many cameras are connected.

- 3 Enter your LEARN credentials.
- 4 Click the **Test Connect** button to test the connection to the LEARN server.

Figure 34: VLP LEARN Window

Table 5: VLP LEARN Field Description

Fields	Description
Server Address	Enter the LEARN server address here. The default is https://learn-nvls.com/learn .
SSL Version	Default is SSL V23.
Username/Password	Enter your LEARN credentials here.
Agency	Enter your LEARN Agency here.
System	Enter the system name that this VLP is known by in LEARN.
Num Buffer	The number of records to store before uploading. Default is 100.
Enable LEARN Multi-Camera	Check this box if there is more than one camera being used with this VLP.
Enable Hot list	Click this switch to enable checking detections against any present hot lists from the selected agency in the Agency field.  NOTE: To enable Hot List, Upload to LEARN must first be enabled.
Time check Hot list	Time until the next hot list synchronization in seconds. Default is 10000.
Enable Check Plate 2	Check this box to enable checking hot lists against secondary LPR images.

3.2.9 Getting Log Files

Procedure:

To generate and download a log file for the VLP containing diagnostic information, click the **Get Log** button.

Figure 35: Get Log



A .rar file will automatically be downloaded to your browser's download folder. Log files are useful for diagnostic purposes and are sometimes requested by Motorola Solutions support for troubleshooting.

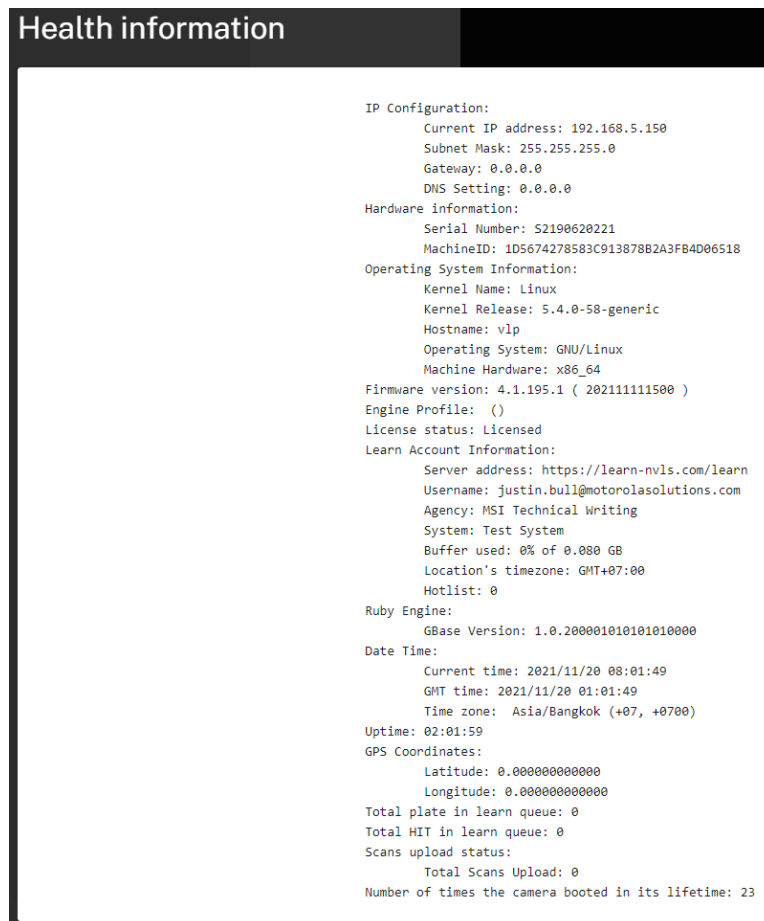
3.2.10 Generating Health Information

Procedure:

To open the **Health Information** window and view various statistics about the current configuration of the VLP, use the **Get Health Information** button.

Useful fields include IP Address, Firmware Version, GPS Coordinates, License Status, and LEARN Connection Status.

Figure 36: Health Information



3.2.11

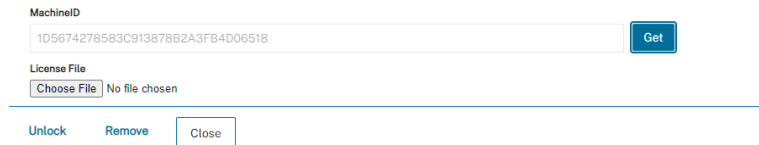
Unlocking License

The **Unlock** button allows you to upload a license file to the VLP and unlock it for use.

Procedure:

- 1 To display the machine ID of the VLP, use the **Get** button.
Machine IDs can be provided to Vigilant support to obtain license files.

Figure 37: License



MachineID
1D567427B583C913878B2A3FB4D06518

License File
 No file chosen

- 2 To select a license file, click **Browse**.
- 3 Once the license file has been uploaded, click **Unlock**.

3.3

Camera Controls Overview

Click the **ReaperHD Camera Controls** or **L5F Camera Controls** tab to view configuration and diagnostic tools for connected cameras.

Figure 38: ReaperHD Controls Tab

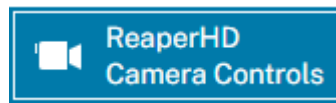


Figure 39: Reaper HD Camera Controls

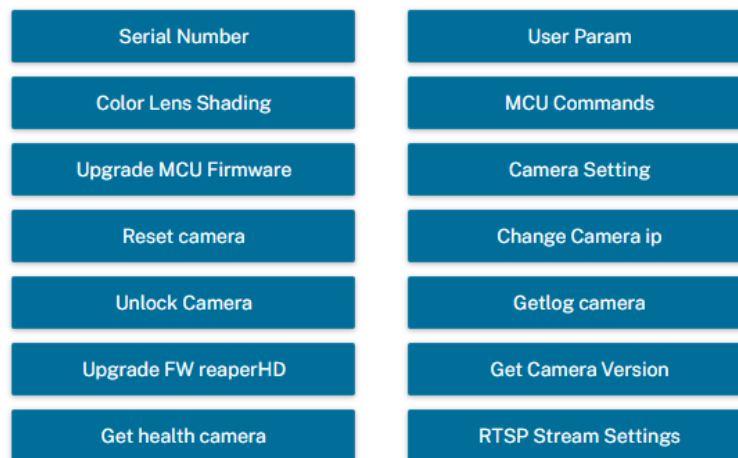
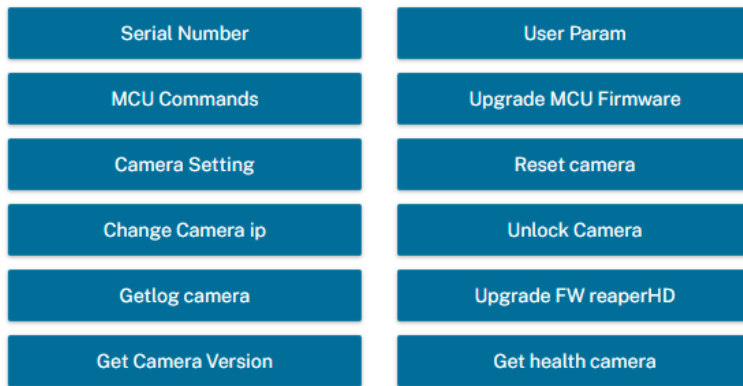


Figure 40: L5F Controls Tab



Figure 41: L5F Camera Controls



3.3.1

Resetting Camera

Procedure:

- 1 To reset just the currently selected camera, use the **Reset Camera** button.
- 2 Choose **Confirm** to reset the camera.

Figure 42: Reset Camera

Confirm

Are you sure you want to reset ?

Dismiss

Confirm

- 3 After receiving a reboot notification, click **Connect** again to reconnect to the camera.

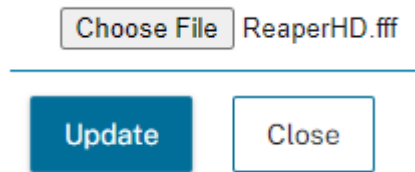
3.3.2

Upgrading Firmware

Procedure:

- 1 Download the latest camera firmware from <https://sites.google.com/motorolasolutions.com/vaas-software>.
- 2 To upgrade the selected firmware of the camera, click the **Upgrade Firmware ReaperHD** button.

Figure 43: Upgrade Firmware ReaperHD



NOTE: Only use valid firmware files received from Motorola Solutions Support to update firmware.

- 3 Select a valid firmware file and click **Update**.

3.3.3

Changing Camera IP

Procedure:

- 1 To change the IP address of the selected camera, use the **Change Camera IP** tool.



NOTE: By default, cameras have DHCP enabled. To view the IP address of the selected camera when DHCP is enabled, use the **Get health camera** button.

Figure 44: Change IP

Interface information

DHCP
 Static

Hostname

Ip Address

Subnet mask

Default gateway

DNS Server

Following are the description for each field:

Table 6: Change IP Fields Description

Field	Description
DHCP/Static	Select Static to specify an IP address. Default is Static .
Hostname	A hostname can be specified here. Default is eth0 .
IP Address	Cameras connected to the VLP will always have a LAN address (<192.168.xxx.xxx>). By default for ReaperHD cameras the IP is in the range <192.168.3.101> to <192.168.3.108>.

Field	Description
Subnet Mask	Subnet mask for LAN IP addresses is always <255 . 255 . 255 . 0>.
Default Gateway	By default, this field can be left blank.
DNS Server	By default, this field can be left blank.

3.3.4

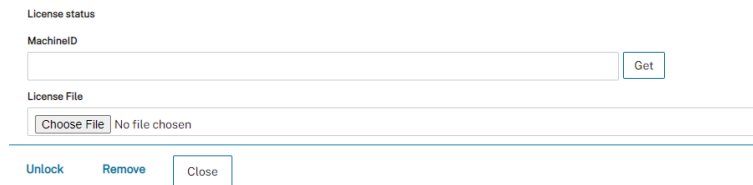
Unlocking Camera

This feature allows you to upload a license file to the camera and unlock it for use.

Procedure:

- 1 To display the machine ID of the camera, use the **Get** button.

Figure 45: Unlock Camera



License status

MachineID

License File

No file chosen



NOTE: Contact Vigilant Support and provide the Machine ID to obtain a license file.

- 2 To select a license file, click **Browse**.
- 3 Once the license file has been uploaded, click **Unlock**.

3.3.5

Generating Camera Health Information

Procedure:

To open the **Health Information** window and display statistics specific to the currently connected camera, use the **Get Health Camera** button.

Figure 46: Camera Health Information

```
IP Configuration:
  Current IP address: 192.168.3.103
  Subnet Mask: 255.255.255.0
  Gateway: 192.168.3.254
  DNS Setting: 192.168.3.1
Hardware information:
  Bar Code Number: 40916-50767
  MachineID: 7D88AE982D18D92A0654F72ABD324B4E
  Current ALS Value: 263
  Camera Revision: 1
Operating System Information:
  Kernel Name: Linux
  Kernel Release: 4.9.79-v7+
  Hostname: raspberrypi
  Operating System: GNU/Linux
  Machine Hardware: armv7l
Firmware version: 1.0.060719.1100
License status: Licensed
Current time: 2018/09/28 23:17:13
Uptime: 01:00:15
Number of times the camera booted in its lifetime: 433
```

3.3.6

Getting Camera Log Files

Procedure:

To generate and download a log file for the currently selected camera, click **Getlog Camera**.

Chapter 4

TAS for WebUI Setup

Target Alert Service (TAS) is an alerting system for Vigilant Solutions camera systems that will check incoming license plate scans against hot lists received from LEARN. An alert is generated in the TAS application when a hot list plate is read by a camera.

4.1

Downloading the TAS Client

Prerequisites: To use TAS, an active PlateSearch user account and a configured camera system are required to connect the VLP to PlateSearch through the WebUI.



NOTE: PlateSearch credentials and System Names are generated by Motorola Solutions support from a processed sales order. Contact your Agency Manager to obtain this information.

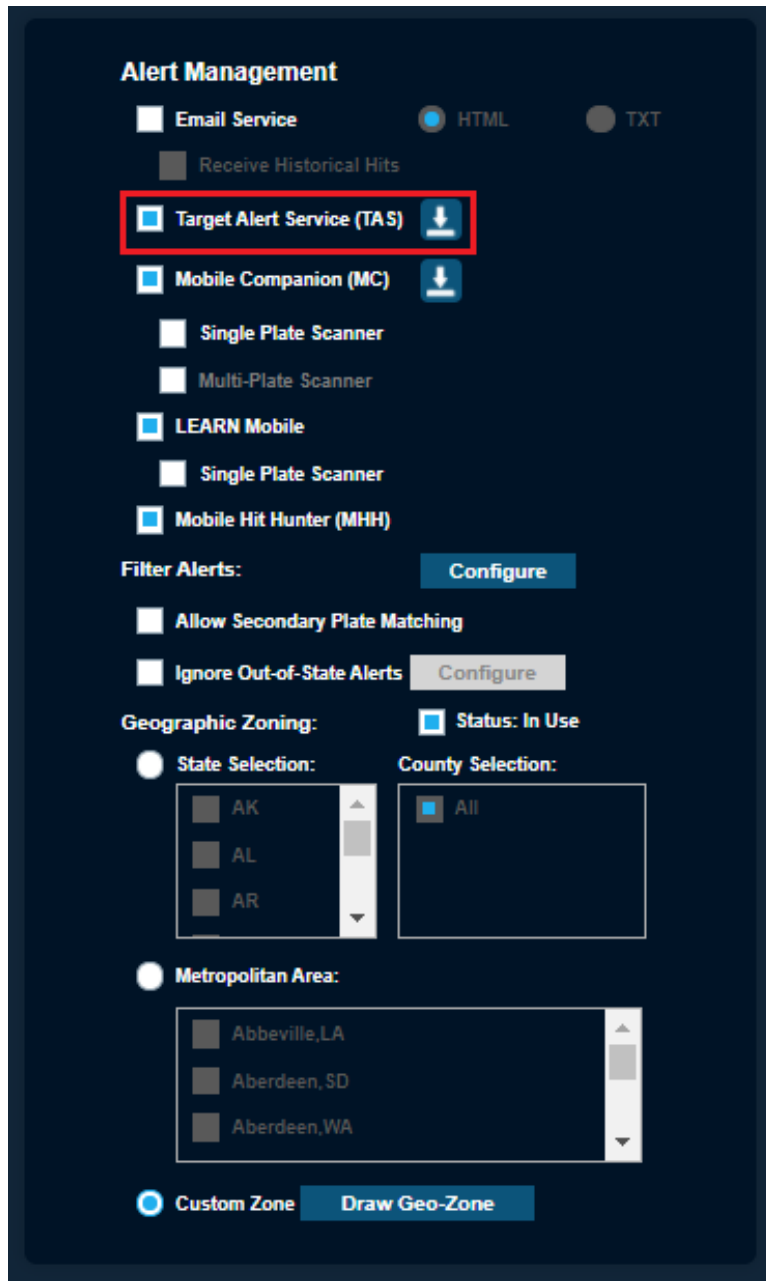
Procedure:

- 1 In the PlateSearch portal, log in with your Username and Password.
- 2 Click **PlateSearch**→**My Profile**.
- 3 Click on the download icon next to the **Target Alert Service (TAS)** check box and click **Yes** when prompted.



NOTE: The TAS Client software must be installed and running on the computer intended to receive TAS alerts.

Figure 47: Vigilant PlateSearch User Profile



- 4 Ensure that the check box next to **Target Alert Service (TAS)** under Alert Management is checked.
- 5 Check the Agency Name and ensure it matches the supplied information.
- 6 If any of the profile information needs to be updated, click the **Update** button when finished.

4.2

Configuring LEARN Connection in WebUI

Procedure:

- 1 Open a web browser and connect to the VLP with the WebUI (192.168.5.150) and click **PlateSearch**.

- 2 Check the **Enable** check boxes under **Upload to LEARN** and **Enable Hotlist**.
- 3 Populate the following fields with the respective PlateSearch login credentials and system information.
 - Server Address: <https://learn-nvls.com/learn>
 - Username
 - Password
 - Agency
 - System
- 4 Click the **Test Connect** button.

Figure 48: VLP PlateSearch Window

Upload to LEARN

Enable

Server Address

SSL Version

Username

Password

Agency

System

Num Buffer

Enable Learn Multi Camera

Shield GPS Configuration (Not for VLP)

Longitude

Latitude

Enable Hotlist

Enable

Time check hotlist

Enable check plate 2

Enable Separate Image To VBD

Enable Separate Image To Amazon S3


Upload Data for YMS India

Test connect Get file **Save Change** Close

- 5 Click **OK** once the The operation completed successfully message appears
- 6 Click **Save Change** and close the window.
- 7 Click the **TAS Center Setting** button.

 **NOTE:** An active connection to PlateSearch is required to configure TAS. See [Configuring the TAS Client](#) for instructions on configuring a LEARN connection.

- 8 Check the **Enable** check box and enter 1234 into the **Listen Port** field.

 **NOTE:** 1234 is the default TAS port.

- 9 To manage TAS users, click **User**→**Add User**.

Figure 49: TAS Center Setting

Tas Center Setting

Enable

Listen Port
1234

User

OK Cancel

UserID	Username	Status	Force receiver component	Permission by camera	Permission by alert	Actions
8	Test_User	Active	No	All	All	Edit Permissions Delete

Add User Export template Export Import Cancel

10 Click the **Active** radio button and create a Username and Password for the TAS user. Click **OK**.

Figure 50: Add TAS User

Edit User

Active

Username
Test_User

Force Receiver Comment

Password

Confirm Password

OK Cancel

11 After a user has been created, use the **Permissions** button to assign which cameras and hot list types that will send alerts to the configured user.

Figure 51: TAS User Permission

Users

UserID	Username	Status	Force receiver
8	Test_User	Active	No

Add User Export template Export Import Cancel

Permissions

All

Camera 1

Camera 2

Camera 3

Camera 4

Camera

Camera

Abandoned Vehicle

Amber Alert

Armed Robbery

Assault

Battery Assault

Copias Warrant

Car Jacking

Child Abductor

Suspended Felon

Disorderly Conduct

Expired

Felony Theft

Felony Warrant

Fugitive

Gang Member

Hit & Run

Law Enforcement Suspect

Madman

Missing Person

Narcotics

Update Cancel

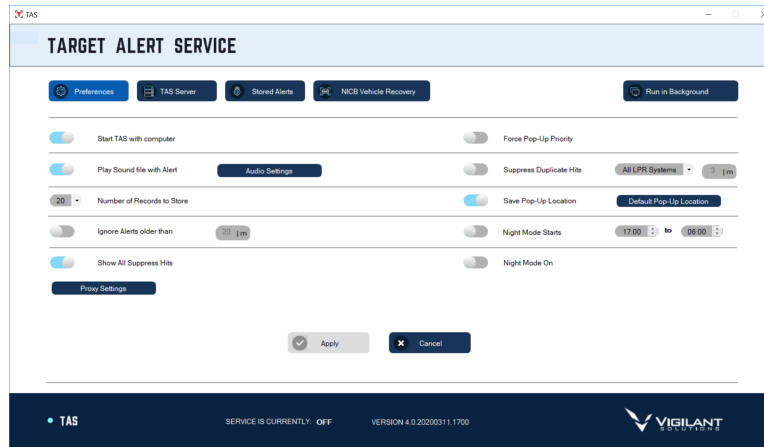
Actions
Edit Permissions Delete

4.3 Configuring the TAS Client

Procedure:

- 1 To install the TAS software, navigate to the **TAS_Installer.msi** file.
- 2 Open the software and click **Yes**.
- 3 Follow the on-screen instructions to install the software. When the installation is complete, the TAS software will open.
- 4 Click the **TAS Server** tab to configure the connection.

Figure 52: TAS Server



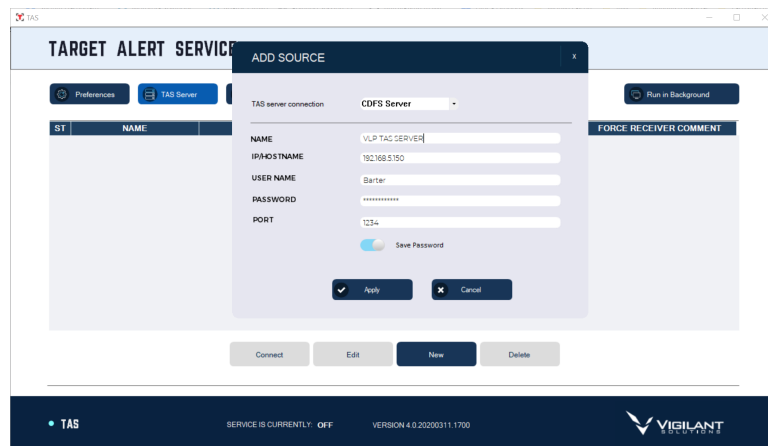
- 5 Click the **New** button to add a new TAS source.
- 6 In the **TAS server connection** drop-down menu, select **CDFS Server**. Populate the remaining fields and click **Apply**.

Following are the description for each field:

Table 7: TAS Server Fields Description

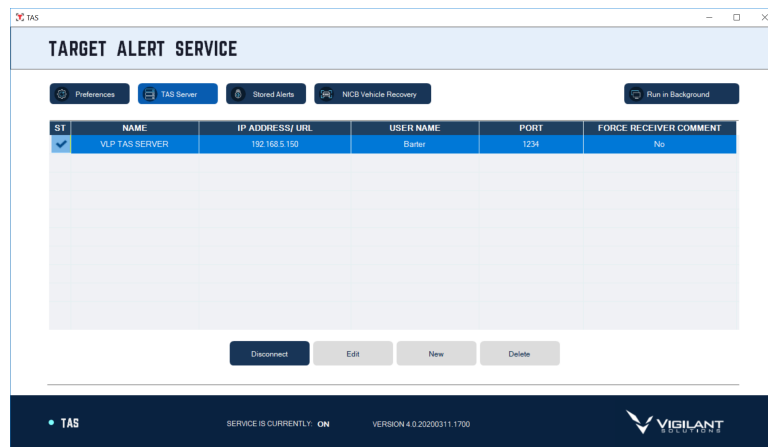
Field	Description
Name	Create a reference name for the new TAS data source. (Optional).
IP/Hostname	The IP address of the VLP server. Use 192.168.5.150.
Username	The TAS user Username created in step 10 .
Password	The TAS user Password created in step 10 .
Port	The TAS applications listening port. Use the default of 1234.

Figure 53: Add Source



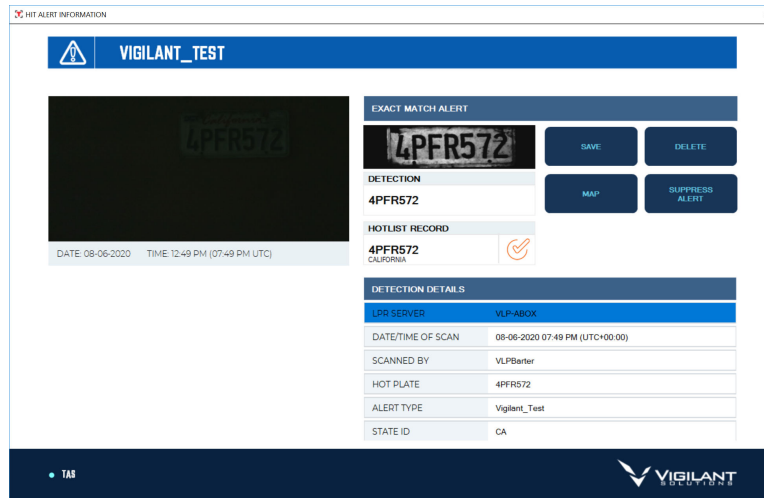
- 7 Click **VLP TAS SERVER**→**Connect**.
- 8 Check to the left of the entry for a check mark indicating that TAS is now connected to the VLP.

Figure 54: Connect to TAS Server



- 9 TAS alerts will now automatically appear and play a sound when a hotlist license plate is read by the target VLP system. Click the **Save** button to save the alert and view it later.

Figure 55: TAS Alert




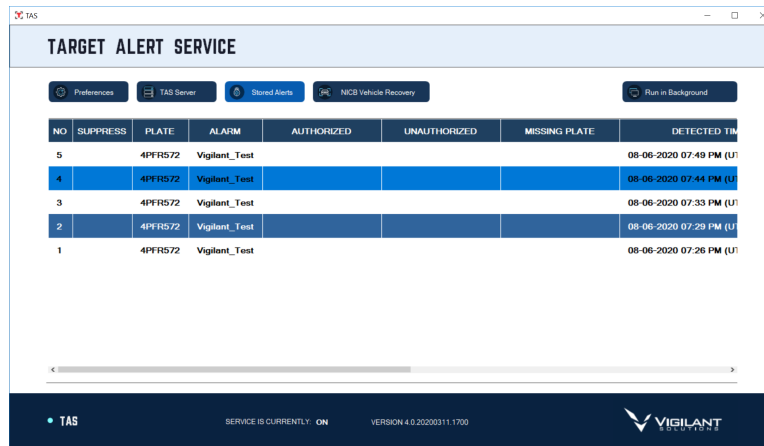
 **NOTE:** To generate an alert, a plate must be on a hot list uploaded to (or shared with) the agency of the PlateSearch user being configured. Only agency managers can manage hot lists.

Figure 56: Stored Alerts



10 To view the saved alerts, click **Stored Alerts** tab.