

# LotGard

## Locate the Scofflaws

*A low cost portable camera search system for recognition of license plate numbers of interest on parked cars from a moving vehicle.*

### **The TDS Portable Mobile Vehicle Plate Reader System**

Whether used for general search support or for mobile parking lot enforcement, automatic license plate identification from a moving vehicle is now possible. In particular, the TDS LotGard portable camera system can be easily attached to any window within the vehicle to identify license plates. LotGard automatically detects, reads and identifies license plates numbers from parked cars while in motion.

Once the plate number has been extracted, several options exist for using it. The concepts of White Lists and Black Lists are implemented in the software application. In simple terms, a white list is a list of vehicles that are allowed and a black list is a list of vehicles that are not allowed. In a closed parking lot situation, the license plate number is compared with a white list of acceptable license plate numbers stored in a database. If This technique allows parking management to quickly identify scofflaws that have parked illegally in restricted parking lots. This technique can be applied to any type of parking lot where the allowed patrons and their license numbers are known.

In another situation, a black list is created that contains vehicles of interest, albeit stolen vehicles or other vehicle groups. Once a license plate number is extracted, it is compared to the black list to identify vehicles of interest.

The system uses a license plate matching software package that is fault tolerant and will quickly locate any license plate that is either an exact match or a near match. This information is presented to the search operator so that a visual confirmation of the plate number can be made.

The system can operate in either of the white list or black list mode. The configuration module allows the user to select the mode of operation. The system has the ability upload and process a black or white list from a memory stick or through a wireless/wired Ethernet connection. Thus the list can be prepared on a desktop PC and transported to the Laptop as necessary.

### **Lane Processor**

The lane processor is a PC laptop running the Linux operating system with X-Windows as the GUI. A custom synchronization can be implemented to keep the scofflaw list on the laptop up-to-date.

- Closed parking lots or other parking areas of interest.

- Completely Portable

- Easily Installed

- High Accuracy OCR

- Daylight Operation

- Optional Illuminator

- COTS Equipment

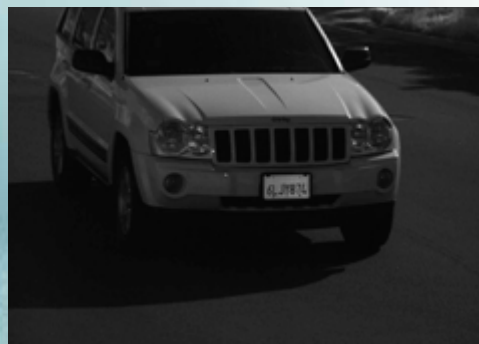
- Software for Easy and Quick Alignment

- Low Cost Solution

- Scan 100's of Cars/Hour

- White or Black List

### ***LotGard Camera Image***





## Camera Installation and Operation

The installation of the system in the host vehicle can be completed in minutes. The camera and its associated mount are attached to the window. The laptop computer power supply is attached to the cigarette lighter insert. The USB cable is connected to the laptop. Once the laptop is booted, the user starts the browser and logs into the menu driven web application. The user starts the capture process and the system begins to look for license plates.

The laptop provides a beep whenever a correlation occurs between the extracted license plate number and the White/Black list. The extracted number is presented to the user for confirmation.

## Optical Character Recognition

The TDS OCR engine leverages the high quality of the images provided by the TDS imaging system to quickly and accurately locate the plate in the image and deliver outstanding read rates. The TDS reader can be "trained" to a single plate style or to multiple styles to maximize the level of automation and reduce manual labor costs.

## LotGard Desktop Software

The TDS system is expecting an excel spreadsheet with the Black/White list information in a specific format. A worksheet template is provided with the system. The spreadsheet is uploaded to the laptop and transferred to the database for use as a lookup table.

## Violation Processing Services

If the user needs an outside firm to process violations, TDS, working with its partner firm Velosum, can provide processing services to the user.

## Basic System Elements

- Camera with Lens
- Laptop
- Window Mount
- USB Cable
- Power Cable

## Optional Elements

- Illuminator

## Software

- Linux Operating System
- Plate Locator
- Optical Character Recognition
- Configuration
- Watch List Maintenance
- Camera Alignment Tool
- Desktop Interface

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