Xerox® Vehicle Passenger Detection System

Xerox® Vehicle Passenger Detection System identifies the number of occupants in a vehicle with 95 % accuracy, at speeds ranging from stop and go to 100 mph.

The system uses video analytics to identify the number of occupants in a vehicle. Geometric algorithms detect whether a seat is vacant or occupied. If the setting on the HOT lane transponder doesn't match with the number of occupants, the system will take a snapshot of the vehicle's license plate and alert law enforcement to the violator.

Enables Full Automation of Violations

Xerox® Vehicle Passenger Detection System identifies the number of occupants in a vehicle with 95 % accuracy, at speeds ranging from stop and go to 100 mph. The high-quality images provided by the system, along with the evidence package enable full automation of violations as legislation allows.

Uphold the Integrity of Your HOV and HOT lanes

Enforcing the rules of the HOV/HOT lanes improves the customer experience for those who abide by the rules. It helps governments validate the integrity of HOV lanes.

- Available as a stand-alone product
- Uses commercially available camera equipment
- Easy to setup – roadside or overhead camera
- Determines windshield location with 99 % accuracy
- High accuracy at highway speeds
  - HOV2 lane: 98.9 % accuracy
  - HOV3 lane: 95.1 % accuracy

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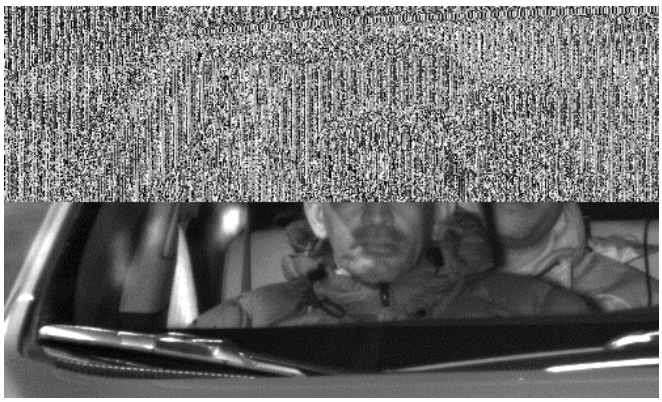
Ideal for Privacy Advocates

For privacy purposes, facial images are redacted. With appropriate authorization, law enforcement or court personnel can view the unredacted photographs.

Therefore, the options are:

No Redaction: this is the original and untouched image.

Permanent Redaction: faces are redacted. This cannot be undone.



Reversible Redaction: the option to reverse redaction (for personnel designated as having appropriate authorization) is also available.

Your Choice of Mobile or Fixed Installation

Depending on your situation, you may choose between a fixed or mobile installation. Both offer the same accuracy ratings, but have their own benefits.

Fixed Installation: In this type of installation, the camera is mounted in a fixed configuration on existing or new infrastructure (Figure 1). The Cameras, Illuminators, and Electronics Package (includes Video Image Processor) must be firmly attached to poles and/or gantries and trained to ensure optimal system performance. Training time for the system is minimal.

Figure 1 - Fixed Installation

Mobile Installation: the system can also be deployed as a Mobile Unit (Figure 2). In the Mobile Unit configuration, a complete self-contained system is mounted on a trailer which can be transported from location to location to ensure that violation enforcement points can be moved around, in order to keep potential violators honest

Figure 2 - Mobile Installation

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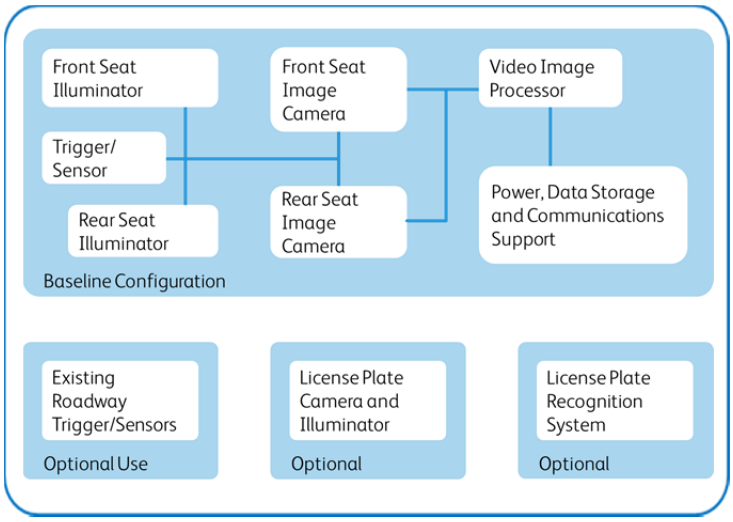
Installation Packages

We offer three different package levels to choose from.

1. Base Configuration: the base configuration that comes with every installation includes front image camera, front illuminator, side image camera, side illuminator, video image processor, power conditioning unit, and a trigger sensor to activate the illuminators and cameras.
2. Option 1-Utilize Existing Sensors: the Xerox® Vehicle Passenger Detection System can also be connected to sensors that are already installed as part of existing infrastructure. Loop-based sensors or laser-based sensors are supported by the system using standard industry interfaces.
3. Option 2- Integrate with License Plate Recognition: in order to create a violation and transaction package that includes license plate images and the results from a license plate recognition (LPR) module, the system can also be connected to a license plate recognition system---either an existing LPR system, or to our License Plate Recognition System.

If you have any questions, please contact us at TLGMarketing@xerox.com or give us a call at 1-877-414-2676.



Xerox® Vehicle Passenger Detection System: Block Diagram

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Equipment Specifications

Specification	Value
Operating Temperature	-40°C to +70°C ambient*
Storage Temperature	-20°C to 80°C
Operating Humidity	20% - 80% RH non-condensing
Operating Supply Range	208/240 VAC
Operating Supply voltage Frequency	47 - 63 Hz
Rate of Speed	5 -100 MPH
Data Storage	The data is encrypted and stored locally.
Data Communications	Store on local hard drive or connect to wireless or landline network
Detection Accuracy	
Front Seat	99%
Back Seat	96%
Region of Interest Detection	99% Front, 90% Rear
Overall Human Readability	>99% Front, 91% Rear

*** System temperature range can be tailored to local requirements**

Specifications subject to change without notice. Contact us for additional information or to schedule an equipment demonstration.

For more information:

Xerox.com/tolling

877.414.2676