

Non-triggered Mode Limitations

Capture Rate

Capture Rate is the percentage of vehicles that cause a detection event.

Triggered ALPR systems generate vehicle detection events based on external vehicle detection mechanisms (such as in-ground loops). In non-triggered mode, events are generated by reading every single frame from live video and applying special analytics. These analytics take several factors into account, and make calculations for each video segment. Triggered ALPR systems provide almost 100% detection accuracy; however, non-triggered accuracy is generally lower, since many external factors can affect detection. For example, in the state of California, customers should expect the following results:

- Standard readable California plates – expected capture rate >95%
- Standard plates from neighboring states – expected capture rate >90%
- Non-standard plates (such as vanity plates, etc.) – plate information should be collected from the site to provide an accurate estimate
- Non-reflective plates – plate information should be collected from the site to provide an accurate estimate
- Human unreadable plates – will not be recognized by the system, and will not be included in the statistics

False Events

A non-triggered ALPR system may generate a number of false events from time to time. Examples are:

Phantom Events

These events are triggered by foreign objects such as stickers, vehicle grills, bicycles, etc. Phantom events are generated when the ALPR system detects some textual information in a video frame, and interprets it as a license plate.

Double Reads

Several events could be generated by a single vehicle, with the same license plate reads, or with different reads. Double reads are generated when the ALPR system returns more than one read on the same plate, or when the plate disappears and reappears due to temporary obstructions. Double reads are discarded from the statistics if the plate was read accurately at least once.

Read Rate

The Read Rate is the percentage of detected license plates that were read correctly.

N-1 means that no more than one character was read incorrectly; N-2 means that no more than two characters were read incorrectly.

- Standard readable California plates – expected read rate >90 (N-1 – 93%, N-2 – 98%)
- Standard plates from neighboring states – expected read rate >85% (N-1 – 90%, N-2 – 95%)
- Non-standard plates (such as vanity plates, etc.) – plate information should be collected from the site to provide an accurate estimate
- Non-reflective plates – plate information should be collected from the site to provide an accurate estimate
- Human unreadable plates – will not be recognized by the system, and will not be included in the statistics