

LPR Overview

# User Guide for License Plate Recognition





# Overview

Verkada's License Plate Recognition (LPR) solution provides organizations with intelligent software for real-time license plate monitoring and streamlining vehicle investigations.

Powered by Verkada's industry-leading edge-based processing and computer vision technology, specially placed cameras are designed to capture license plate images and provide users with a readable, searchable list of license plate numbers. These license plate captures are linked to live or recorded video for complete context around vehicle events. Utilizing Verkada's hybrid cloud approach, using LPR has minimal impact on bandwidth (<100 kbps), and all video, images, and license plate data are encrypted at rest and in transit.

To use LPR, no additional software licenses or hardware is needed. This guide will take you through the requirements and steps to ensure LPR delivers the best results.



# License Plate Recognition

## Solution Overview

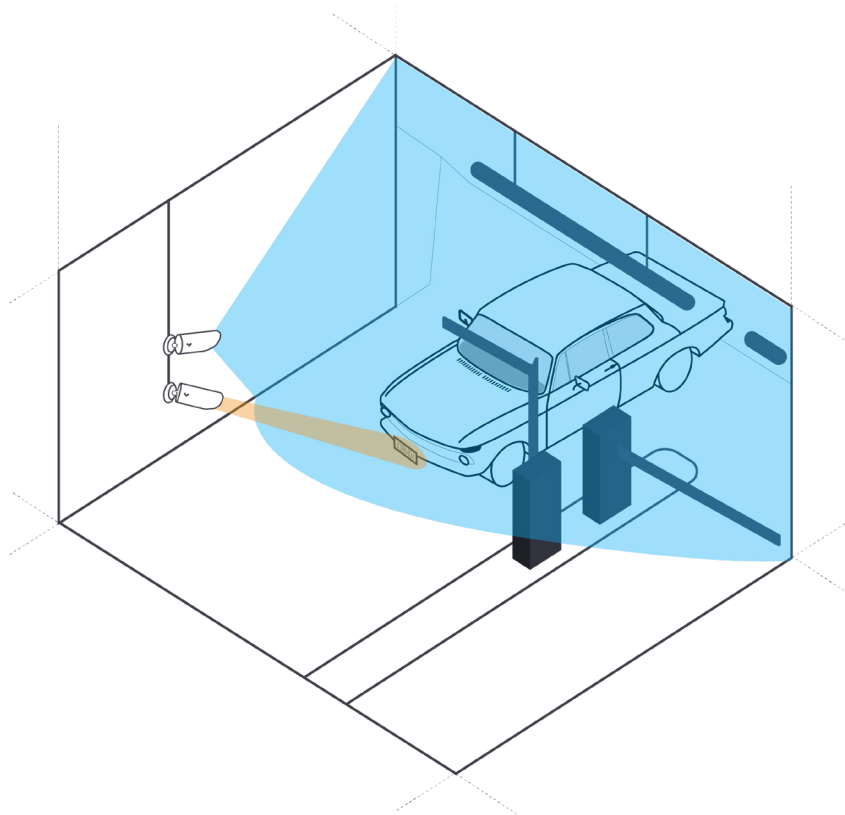
Verkada's LPR solution utilizes a dual-camera system powered by Verkada's Bullet Series. In this system, users have a dedicated camera for detecting close-up views of license plates (LPR Camera) while an additional camera records the entire vehicle and additional context (Context Camera).

### LPR Camera

Verkada Telephoto Bullet Camera  
CB51-TE (5MP) or CB61-TE (4K)

### Context Camera

Verkada Wide Angle Bullet Camera  
CB51-E (5MP) or CB61-E (4K)



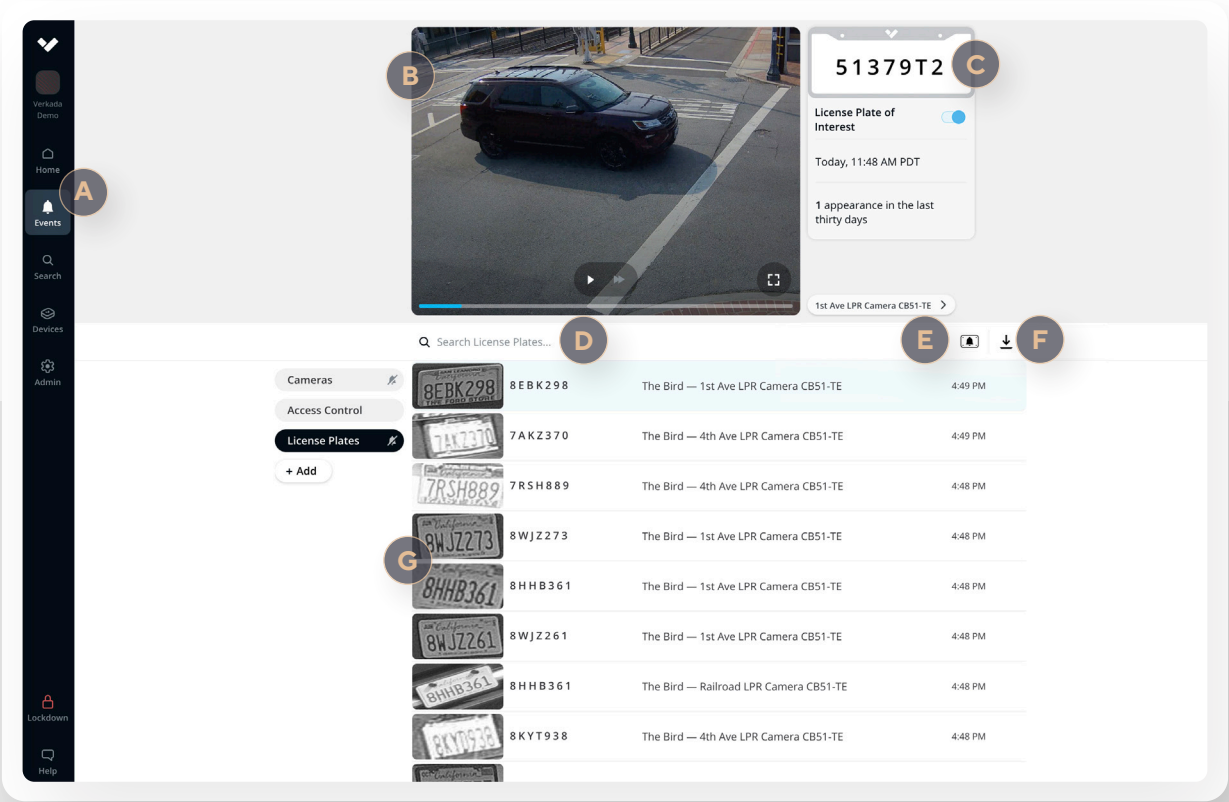
## Can I use my LPR camera for broader video security?

The LPR Camera is optimized to capture license plates and not for broader surveillance purposes. When designated as an LPR Camera, these cameras switch to an IR-only mode with lower exposure and higher frame rate to ensure accurate license plate detection even under challenging lighting conditions. Verkada's People & Vehicle Analytics capabilities are also disabled in LPR mode. The Context Camera should be used for broader security applications.



# Platform Overview

From Command, Verkada’s web-based management platform, users can access their LPR cameras and see real-time and historical footage of vehicles.



**A**  
Accessing LPR  
From Command

**B**  
Context Camera  
Feed

**C**  
Translated License  
Plate

**D**  
License Plate  
Search

**E**  
Tracked Plates

**F**  
CSV Export

**G**  
Event Feed

# Installing Your LPR Camera

Before installing your LPR Camera, there are a few considerations to keep in mind:

1

## LPR Cameras Monitor Single Lanes

For this reason, the LPR camera should be positioned to face a single lane of traffic, such as an entrance or drive through.

2

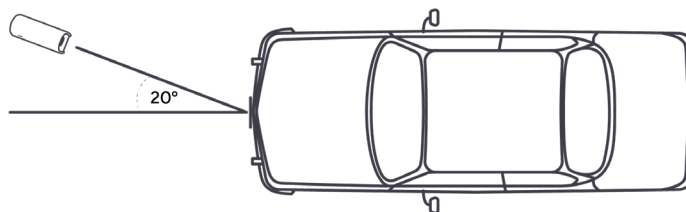
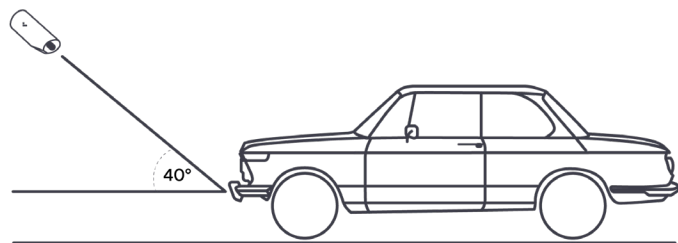
## License Plates Should Be Within 60 feet (18 meters)

Verkada's LPR solution provides the best results when vehicles are no more than 60 feet (18 meters) away from the LPR Camera.

3

## Proper Positioning Improves Accuracy

LPR Cameras should be positioned no more than 20° horizontally and 40° vertically from the location of the license plates.



## Enabling LPR Mode

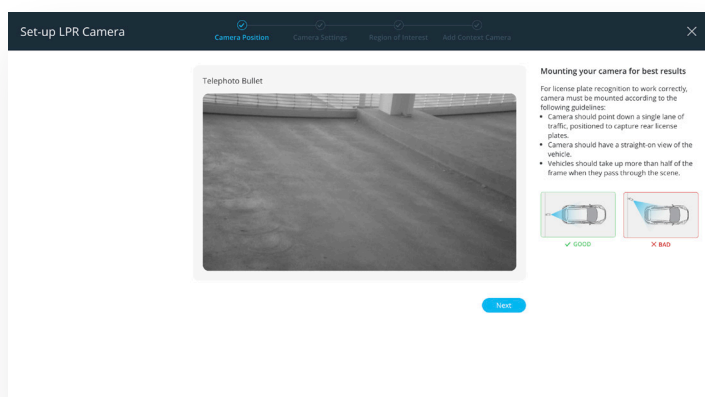
In order to use LPR on your Telephoto Bullet Camera, you will need to switch the camera into LPR Mode. When enabling LPR Mode, the camera will go through a firmware update, which may take up to five minutes.

To enable LPR Mode:

1. Go to the designated LPR Camera's page
2. Click the "Settings" tab
3. Click on Settings
4. Click on Device
5. Toggle on LPR Mode

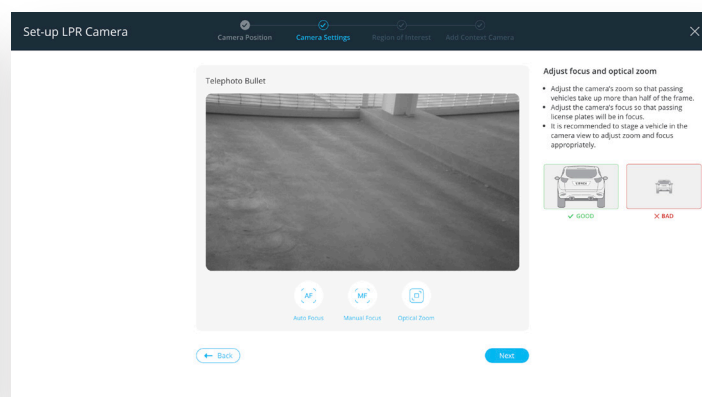


# Setting Up Your LPR Camera



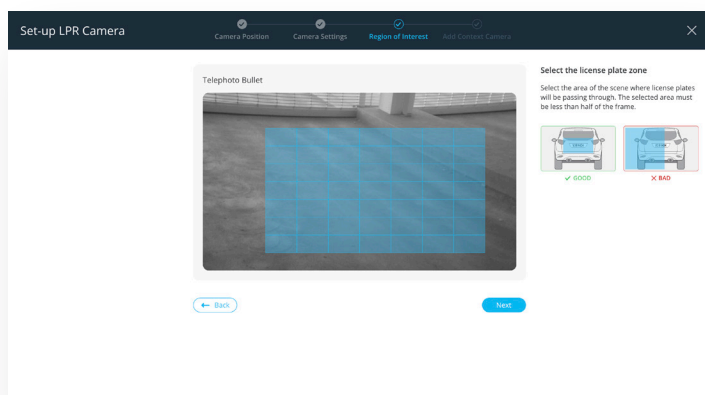
## 1 Position Your LPR Camera

Cameras should be positioned facing a single lane of traffic with a straight-on view of the vehicle.



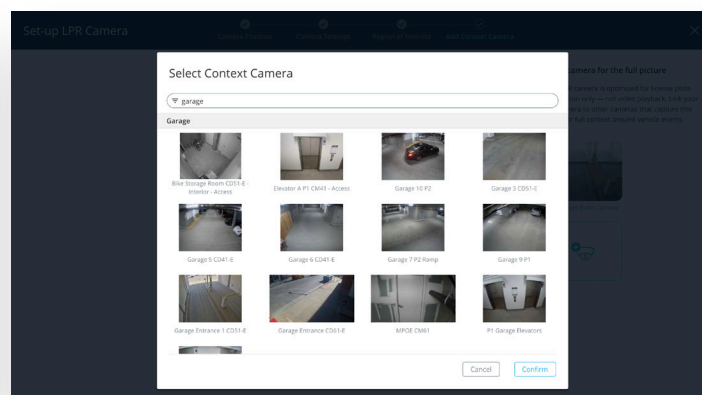
## 2 Focus and Zoom Your Camera

Using the built-in focus and optical zoom features, adjust the camera's field of view so that a passing vehicle takes up the majority of the frame and license plates are in focus. You may need to stage a vehicle in the area to ensure proper positioning and focus.




## 3 Select the License Plate Zone

Using the grid, highlight the area through which license plates are most likely to pass. The highlighted area should be less than 25% of the frame, as pictured here.

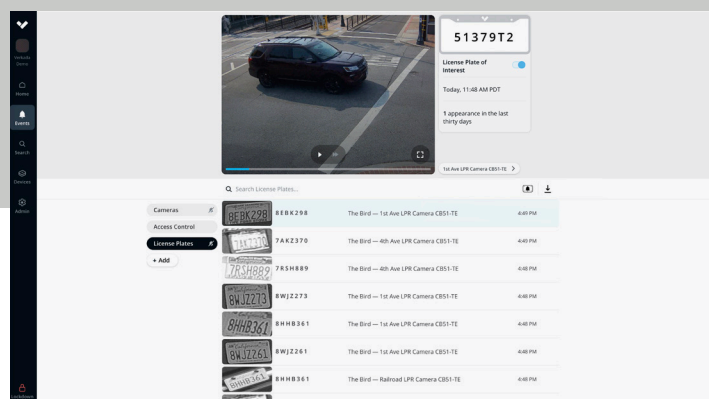


## 4 Add Your Context Camera

Clicking the , select the Context Camera to associate with your LPR camera. This will automatically associate context footage with live and historical license plate events.

# Common Use Cases

Verkada's LPR solution is designed for detecting license plates in a single lane where vehicles are traveling at less than 20 MPH (32 KPH).



## License Plate of Interest Alerts

Receive real-time alerts when a specific license plate is detected across any of your locations. Send notifications to 3rd party applications through the Verkada Webhooks API.

## Parking Garages & Lots

Quickly investigate vehicles of interest by searching for all historical appearances of a reported license plate.



## Gatehouse/Entry Station

Monitor vehicle traffic for authorized vehicles while keeping entryways safe and secure.





## Drive Throughs

Capture a record of all license plates for vehicle count analytics and business intelligence applications.



# LPR Ordering Information

Product Name	Days	SKU	Price (MSRP)
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## Context Camera

 CB51-E	30	CB51-30E-HW	\$1,399
	60	CB51-60E-HW	\$1,799
	90	CB51-90E-HW	\$2,199
	365	CB51-365E-HW	\$3,599
 CB61-E	30	CB61-30E-HW	\$1,799
	60	CB61-60E-HW	\$2,699
	90	CB61-90E-HW	\$3,599

## LPR Camera

 CB51-TE	30	CB51-30TE-HW	\$1,499
	60	CB51-60TE-HW	\$1,899
	90	CB51-90TE-HW	\$2,299
	365	CB51-365TE-HW	\$3,699
 CB61-TE	30	CB61-30TE-HW	\$1,899
	60	CB61-60TE-HW	\$2,799
	90	CB61-90TE-HW	\$3,699



# Additional Questions?

Please contact your Verkada sales representative  
or email [support@verkada.com](mailto:support@verkada.com).



## About Verkada

Verkada brings the ease of use that consumer security solutions provide, to the levels of scale and protection that businesses and organizations require.

By building high-end hardware on an intuitive, cloud-based software platform, modern enterprises are able to run safer, smarter buildings across all of their locations.

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