

# ADHAM

**SMART PATROL - ENRICH LAW  
ENFORCEMENT INTELLIGENCE**



An integrated, modular, and scalable law enforcement solution built to assist and empower law enforcement agencies in crime prevention.

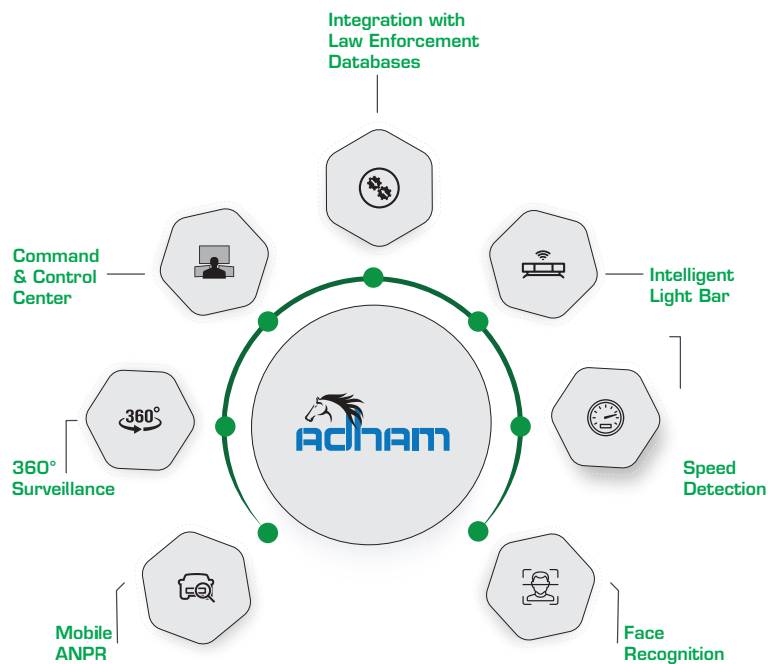
The system design incorporates advanced market-leading cameras for Automatic Plate Number Recognition, 360° surveillance, face recognition, and speed detection, in addition to an innovative software allowing system operators complete access to robust features.

ADHAM Smart Patrol, governments and law enforcement agencies can transform traditional police patrols into smart patrols equipped with state-of-the-art communications and surveillance gear.



## ADHAM SMART PATROL POWER FEATURES

- ▶ An intelligent light bar mounted on top of the vehicle with embedded ANPR and 360° surveillance cameras, a mobile speed radar, and facial recognition cameras.
- ▶ An interactive command management interface and alerts to supervise suspect lists, over-speeding vehicles, and captured plates.
- ▶ Real-time field intelligence with visual and auditory alerts of identified blacklisted or over-speeding vehicles.
- ▶ International plate number support including Arabic characters and numbers.
- ▶ Access to live streaming videos or footage from the Command and Control Center.
- ▶ Storage of GPS coordinates and timestamps of captured number plates.



## MAIN FEATURES

### Intelligent Light Bar

The intelligent light bar is designed in compliance with police standards for light configuration and ruggedized to withstand harsh weather and operational environments.

The embedded ANPR, surveillance, face recognition cameras, and speed radars integrate into one unit with a sleek aerodynamic build that accommodates airflow and reduces drag.





## Speed Detection

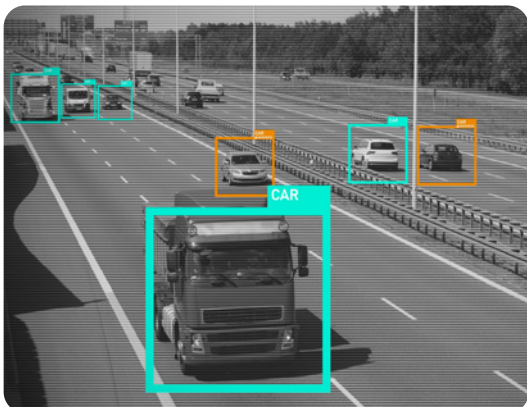
Stationary or moving patrol vehicles are equipped with sensors that accurately measure the speed of passing vehicles. When speed limits are breached, the ANPR camera captures the vehicle plate number to provide real-time and reliable evidence upon request.

- ▷ **Precise Speed Measurement:** accurately measuring the speed of any vehicle for speed violation issuance.
- ▷ **Reliable and Documented Evidence:** intelligent ANPR camera activation
- ▷ **Stationary or Mobile Modes:** supports accurate speed detection during the movement or stationing of the police car.

## Face Recognition

Applying AI-based facial recognition algorithms to ensure rapid face capture and processing. Once scanned, the image is compared in real-time against the watchlist database to immediately notify officers through visual and auditory alerts in case of a match. The system can accurately and simultaneously cross-match multiple faces of people looking straight into the camera or in profile mode.

- ▷ **Robust System:** the simultaneous capturing, processing, and recognition of multiple images.
- ▷ **Instant Database Updates:** adding people profiles to watchlists and setting custom alerts for positive matches.
- ▷ **Accurate Recognition:** the precise comparison of two or more face samples in real-time.



## Mobile ANPR

The Mobile ANPR system rapidly captures and processes license plate numbers, recording timestamps, GPS coordinates, and other plate metadata. The information and footage are then communicated to the Command and Control Center.

- ▷ **Supports Different Plate Types:** including private, taxi, motorcycle, police, government, UN, and other unique formats such as old-style GCC and Middle-Eastern license plates.
- ▷ **Supports Different Writing Systems:** the system recognizes Arabic characters and numbers.
- ▷ **Machine Learning:** the system used advanced machine learning capabilities to learn and recognize new plate types, shapes, colors, and variations.
- ▷ **High Confidence:** processed images are tagged with recognition confidence levels to maximize accuracy.
- ▷ **Enhanced Images:** automatically enhances images that suffer distortion due to harsh weather conditions or poor lighting.

## 360° Surveillance

The solution relies on high-quality surveillance cameras to record videos with complete coverage. The system streams videos directly to the Command and Control Center, or records footage to be provided on-demand.

The visibility range of surveillance cameras enables officers in the vehicle or at the Command and Control Center to monitor vehicle surroundings crucial as evidence for suspicious or criminal activities.

- ▷ **Ultra Wide-Angle Surveillance:** filming and recording videos up to 360° to provide extensive coverage of vehicle surroundings.
- ▷ **Live Streaming and Recording:** collect practical evidence in support of investigative efforts and decision making.
- ▷ **Configurable Parameters:** system video recording settings customized to fit client surveillance requirements.





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## Command & Control Center

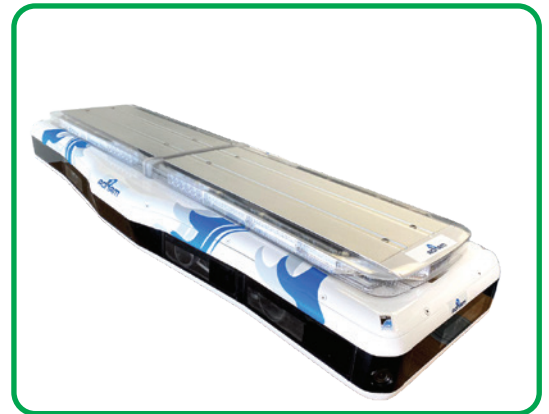
The solution supports the Command and Control Center with comprehensive tools that offer a wide range of functions to ensure the smooth flow and management of surveillance and crime detection operations. Scalability enables efficient integration with client command centers to assist critical processes with advanced reporting capabilities.

The platform supports live or pre-recorded surveillance video management from remote locations and broadcasts real-time updates from mobile ANPR databases using functions such as mapping, real-time tracking, video review, and automatic alerts for blacklisted vehicle detection.

## Integration with Law Enforcement Databases

For smarter surveillance, the integration with law enforcement databases is simplified using a direct live link that connects in-vehicle systems to the Command and Control center to exchange lists of blacklisted vehicles. Processed license plate numbers are cross-checked against the database for potential matches. The database can be downloadable to the in-vehicle system or broadcast live using 3G, LTE, or GPRS.

- ▶ **Remote Surveillance Management:** the backend system receives activities and transactions from the in-vehicle system and posts database updates such as list updates.
- ▶ **Advanced Tracking Functions:** real-time GPS coordinates, mapping integration, and real-time tracking to carry out the surveillance process with critical precision.
- ▶ **Resilience and Scalability:** the system can be tailored to the client's operational requirements.
- ▶ **Constant Database Updates:** Importing new and modified data from the in-vehicle system ensures that the database remains up-to-date.



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