## **Roba**PLATE<sup>3</sup>





Automatically capture and store vehicle number plates



Automatically display messages for chosen vehicles



Retrospectively search your database by Plate, Date Range or Vehicle Owner

## Low Cost RoboPlate Lite captures snapshots of number plates to alert operators by pop up or email and allow easy vehicle access control.

- Stores plates locally for retrospective searching
- Compatible with UK and most European plates
- Standalone software works with suitable cameras
- Displays pop up messages for receptionists & security staff
- Sends an email to business owner or a monitoring station
- Easy to create whitelists of approved vehicles
- Group Membership feature for extra functionality
- Triggers a pre-recorded sound/message file on VoiceOff
- Triggers network relays to open gates, barriers etc

RoboPlate software is a series of automatic number plate recognition (often abbreviated to ANPR or ANLR) modules allowing you to start with a basic system and bolt-on or upgrade as and when required. It makes a standard ANPR system affordable to any organisation even home owners and allows you to buy additional "nice to have" features at a later date.

## **More Details**

The various software modules work in tandem with at least one CCTV camera to capture and store snapshot images of vehicle number plates that can then be analysed and stored to a database for later interrogation.

This budget friendly 'Lite' version of the RoboPlate software provides the user with everything they need to get up and running with ANPR. Simply set up a suitable CCTV camera to capture your number plate on your new or existing DVR/NVR, enter the required connection information in the RoboPlate software and you'll be capturing a list of number plates in minutes.

RoboPLate LITE is ideal for domestic use or in smaller businesses with a limited number of staff or fleet vehicles. The RoboPlate STANDARD version has the added benefit over the LITE version of "Group Membership" a feature that's ideal for larger businesses. Time and date ranges can be added to these groups to control access during different periods such as shift workers or to control access by temporary staff or contractors.



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### **Quick and Easy Setup**

RoboPlate software provides the user with everything they need to get up and running with ANPR. Simply set up a suitable CCTV camera to capture your number plate on your new or existing DVR/NVR, enter the required connection information in the RoboPlate software and you'll be capturing a list of number plates in minutes.

### Plates added to Database for Later Searching

As use of RoboPlate continues, the database of number plates builds up. As each plate result is stored with a date and time stamp too, it can be interrogated to find any emerging patterns of behaviour such as a suspect vehicle in the car park late at night.

## White List Comparison to Trigger Actions

RoboPlate LITE and STANDARD both have the ability to log the plates recognised by a camera and compare them against a white list for a subsequent action to follow. For example a fleet vehicle registration match to a white list might trigger a relay to open a security barrier to an unloading bay.

### **Group Membership to Manage Vehicle Access**

STANDARD has the added benefit over the LITE version of a "Group Membership" feature, this is ideal for larger businesses. With Group membership you are able to limit the trigger action to within a predetermined schedule. For example you might trigger your car park gate to allow access to staff Mon-Fri 8am to 8pm, whilst Managers can access 8am-8pm including weekends but a security patrol vehicle might have access 24/7 without interruption.

### Manage Vehicle Access then Trigger Actions

A date range field can also be added to this membership to control access during holiday periods or to control access by temporary staff or contractors. Groups on a single site might include:

**Key Holders Night** - Everyday 8pm-8am triggers an Action Group to open main entrance gate, switch on a photocell controlled courtesy light then email a monitoring centre.

**Key Holders Day** - Everyday 24/7 triggers an Action Group to open main entrance gate, switch on a photocell controlled courtesy light then nothing.

**Security Patrol** - Everyday 24/7 triggers an Action Group to open main entrance gate, switch on a photocell controlled courtesy light then email the Operations Manager so they are aware the patrol has taken place.



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**Management** - Everyday 8am-8pm triggers an Action Group to open main entrance gate, switch on a photocell controlled courtesy light then nothing.

**Staff - Monday**-Friday between 8am and 6pm all year round triggers an Action Group to open the main gate entrance.

**Approved Contractors** - Monday-Friday between 8am and 10pm all year round triggers an Action Group to open the main gate entrance then plays a delayed message asking them to report to reception.

**Seasonal Staff** - Monday-Friday between 8am and 6pm from 1st to 24th December only triggers an Action Group to open the main gate entrance.

**Customer** - Monday-Friday between 8am and 6pm all year round triggers an Action Group to open the main gate entrance then plays a delayed message asking them to proceed to visitors parking area and report to reception.

### Network Control over Vehicle & Access Control Equipment with LAN Relay Module

RoboPlate LITE and Standard are easy to integrate into a network using the add-on LAN Relay module to give control over network security devices such as Access Control equipment like the ZAP range. For example a match with a vehicle white list of a staff number plate could provide double verification of who they are before they try and access the building.

A handy delay feature of up to 99 seconds is useful if you are capturing a vehicle prior to it reaching a barrier or gate so you can delay its opening.

## Low Cost Bolt-On Modules for Added Functionality

Both RoboPlate LITE and Standard include 3 modules:

**Capture** - where it captures the image, deciphers and logs the vehicle licence plate

**Configure** - where subsequent actions can be set up such as Pop-Ups and Email sending and more meaningful data can be added to the plate record.

**Search** - where the operator can search for occurrences of a plate (in part or full) to filter when and where it has been detected.

Additional modules are available to allow extra PC users to interrogate the results captured by the main program; these include both Configure and Search functions. An example might be where the main RoboPlate copy is run by the IT department but extra modules are run by the HR department to monitor staff attendance.









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## FTP for Cloud Data Storage (Add-On Module)

This handy add-on module is great for multisite operations where you may wish a central office to manage the results database of various sites across the country for example managing a logistics operation with multiple depots.

## **System Requirements**

Operating System	Microsoft Windows 7, 8, 8.1 or 10 both 32bit and 64bit supported*
Processor	Intel i5 3GHz Quad Core minimum
RAM	4 GB recommended for 32 bit; 8 GB recommended for 64 bit
Graphics Card	Dedicated card recommended
Screen Resolution	1920 x 1080 required
Hard Disk	Installation requires approximately 85Mb, additional space is required for long term storage of images
Internet Connection	Internet connection is required for registration and activation purposes initially and subsequently for support purposes thereafter. An Internet connection is not required for normal day-to-day program operation.

\*Windows XP, Vista and server editions are not supported.

## Licensing

Licences	1 per PC
Support Period	12 months. Free updates available within the support period*

\*Downloads within the support period are available via your personalised Control Panel..

## FAQs

### What DVRs work with the RoboPlate ANPR software?

#### Answer

At the time of writing RoboPlate only supports Alien branded HD-TVI or HD-SDI DVRs with a corresponding HD camera. IP cameras are currently not supported from these devices. Additional information will be made available online at RoboPlate.com in due course.



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# What sort of cameras do you need for the RoboPlate ANPR software?

### Answer

A regular HD CCTV camera is all RoboPlate ANPR software requires but good lighting and appropriate camera settings will all help to improve image quality and therefore detection and recognition rates. A simple test is that if a number plate cannot be read by the naked eye then it is unlikely to be captured by a standard CCTV camera which means that RoboPlate will not be able to read it either.

# What resolution image does RoboPlate ANPR software require?

#### Answer

RoboPlate can process images captured at 1280x720 or 1920x1080, for DVRs, this should be the recording resolution.

# Can an analogue DVR be used with the RoboPlate ANPR software?

#### Answer

Not really, older technology simply doesn't have the detail required. An image resolution of 4CIF, 705x576 or below does not provide sufficient pixel density to deliver a successful result. It would need to be a very closely cropped view of the plate for 4CIF to make a reading so in reality an entry level HD resolution of 1280x720 is required. You could say that investing in ANPR software is a little wasted if you had not invested in a HD CCTV system first.

# Does RoboPlate ANPR software work in bad weather such as rain, fog or snow?

### Answer

Anything that prevents a clear view of a vehicle registration plate will hinder the program's ability to obtain a successful result. This includes rain, fog, snow and other obstructions. You will need to keep the lens of your camera clean and free from cobwebs too.



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# Can RoboPlate ANPR software read non-standard number plate characters?

### Answer

RoboPlate uses OCR / shape matching technology to identify characters by their outline. It does not look for or match to specific fonts. It expects characters to be regular upright shapes in keeping with license plate guidelines rather than fancy/italic style. Some owners of 'private plates' in the UK re-position mounting screws or deliberately change a character's shape to make their plate more desirable, in doing so, they will make recognition harder.

# How slow do vehicles need to be travelling for RoboPlate ANPR software to capture the number plate?

#### Answer

RoboPlate captures about two frames per second directly from the DVR so it is intended for slow moving traffic that stays in the field of view for a reasonable amount of time to achieve this. It is good to bear this in mind at the time of installation as you can try to position your camera facing oncoming vehicles head on where they may naturally slow down or stop such as at a gate way, barrier or narrowing of the road.

# How much disc space is required when installing and running RoboPlate ANPR software?

#### Answer

Installing the application will require approximately 85Mb initially. As images are captured the data directories will grow by about 350KB per recognition.

# Does RoboPlate ANPR software support any remote monitoring services such as Immix?

### Answer

Yes RoboPlate can be easily integrated into Immix.

### How can I set up my camera to avoid any false results?

#### Answer

Many factors affect recognition such as partially obscured or background object or signage within an image that can appear to be legitimate characters detectable by the OCR engine. Palisade fencing



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caught at the wrong angle can cause it, but anything that appears to be a character or impacts on a character or its outline can produce a result.

Adding RoboPlate can transform the versatility of your system by comparing data against whitelists of approved staff or visitors to help monitor and even manage physical access to a site. The ability to interrogate a log also helps you to detect any visitor patterns.

## **Quick Links**

#### RoboPlate ANPR - Standard Version https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-

https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-Recognition-Software



### RoboPlate ANPR - Search Module

https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-Recognition-Database-Search-Module

#### RoboPlate ANPR - FTP Module

https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-Recognition-FTP-Upload-Module

### RoboPlate ANPR - LAN Relay Module

https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-Recognition-Lan-Relay-Module

### RoboPlate ANPR - Configure Module

https://softcctv.com/store/Item/RoboPlate-ANPR-Number-Plate-Recognition-Database-Configuration-Module







