Talon
Automatic Number Plate Recognition Software

Serious about ANPR. Serious about service.™

Powerful high performance ANPR software engine with Neural Network Technology

The TALON Automatic Number Plate Recognition (ANPR) software since its first deployment over 15 years ago has been constantly improved and enhanced and now provides one of the highest accuracy number plate recognition software engines in the world.

TALON runs on any modern PC platform running the Windows Operating System (including laptops) equipped with a suitable frame grabber. The engine supports multiple camera systems allowing simultaneous multi-lane capture and optimum recognition performance for stationary, low or high speed traffic within milliseconds.

With embedded Neural Network technology in its design, the Talon ANPR engine provides one of the highest accuracy and recognition speed ANPR tools on the market. Incorporating complex algorithms for image manipulation and clustering analysis, Talon's neural network technology is able to recognise poorly defined, distorted and dirty characters during all weather conditions with high and continuously improving recognition accuracy. Due to the use of gray-scale character matching the Talon engine provides finer discriminations than binary or OCR methods thus ensuring a high confidence level in the accuracy of results.

The Talon ANPR application software stores data in a SQL compliant database where it could be cross referenced or matched against multiple hotlists to generate visual and audible alarms, audited, transmitted via LAN/WLAN/GPRS or 3G, archived or further interrogated.

Using sophisticated probabilistic context checking techniques, Talon ANPR can be configured for multinational number plate recognition allowing rapid deployment into new countries and territories.

The TALON ANPR engine can be supplied as a standalone number plate recognition engine or can be embedded into third party applications. Additionally software can be provided with one of NDI Recognition Systems (NDI-RS) diverse range of fixed site, in car, and access control ANPR applications.

Due to its many advantages TALON remains the ANPR engine of choice for many mission critical ANPR installations in the UK and Worldwide.

Key Features:

» Neural Network Technology

» NAAS compliant

» High recognition accuracy and speed

» 24hr / 365 day performance

» Day and night number plate recognition capability

» High performance automatic 'in picture' trigger

» International plate reading capability

» Accurately reads different sized plates, small or large, near or far

» Automatically reads both normal and inverse plates or rectangular and square plates

» Operates on various PC platforms

» Number plate image capture and colour overview image

Specifications

Supported Operating System	WinXP Pro
Recognition Engine	Neural Network Technology
Trigger Process	Automatic in picture video trigger - no need for external trigger devices. If required, external triggers such as inductive loops or lasers can be supported.
Recognition Accuracy	Typically 98% (depends on the image quality).
User Interface	Graphical User Interface (GUI), keyboard mouse or touch screen.
Additional Tools	Software Development Kit (SDK) for easy integration, via ActiveX control.
	Active X containers including Visual C++, Visual Basic, have full control of Talon.
Type of Plates Recognised	Recognition is country dependent, includes European, Middle Eastern, North and South America and Asian plates.
	A full list is available on request. Talon's neural network technology can be trained to recognise most international plate formats.
Plate Types Recognised	Rectangular, square, normal and inverse polarity .
Plate Rotation	High performance automatic detection and correction up to +/- 10 degrees. At higher plate rotation angles, plate recognition will still be effective but performance may be reduced.
Plate Skew	Correction of character skewing (italicisation) to +/- 10 degrees. At higher plate skew angles, plate recognition will still be effective but performance may be degraded.
Image Input	Memory, file and supported frame grabbers including: PCI or USB Frame Grabbers.
	Talon is capable of taking digital images direct from files for recognition processing - ideal for back office (BOF) applications.
File Types	BMP, JPEG.
Video Formats	8 bit monochrome (Grayscale), RGB24, YUV.
Image Size	PAL /NTSC standard sizes.
Typical Processing Time	200ms.
Output	Including but not restricted to: Plate number in ASCII / Recognition confidence level Plate position / Country Date and Time / GPS position Lane Number / Camera number Plate patch image /Overview image
Documentation	Reference Manual in electronic format
System Requirements (min)	1.8 GHz CPU – Intel Core 2 Duo 2 GB RAM Free PCI / USB port for supported frame grabbers

Applications

» Mobile and Fixed Sites

» Policing and Law Enforcement

» Access Control

» CCTV Integration

» Car Park & Traffic Management

» Enforcement

» Bespoke Applications

» Road User Charging

» Journey Time Analysis

» Waste Sites Control

Due to a policy of continued product development, NDI Recognition Systems Ltd reserves the right to alter or amend any published specifications without notice.