CARMEN® UIC Software

UIC RAILWAY CODE RECOGNITION SOFTWARE LIBRARY & SDK

OCR RESULT:
33-80-7920077-4

THE ULTIMATE RECOGNITION ENGINE
FOR INTELLIGENT RAILWAY APPLICATIONS

The Carmen® Railway Code Recognition software (Carmen® UIC), is a unique version of the Carmen® Recognition Software family. Carmen® UIC is created to extract and read the UIC numbers from railway vehicles. Railroad wagons, just as commercial motor vehicles and ISO containers, have their own unique and internationally common identification numbers. This identification number on a railroad wagon or coach is called the UIC number.

By recognizing the UIC codes on train cars, Carmen® UIC provides unparalleled accuracy and speed for railway transportation applications. Commercial railway systems carrying cargo or passengers can capture data without human effort by offering automatic data entry and transmitting for further processing. Automated reading of UIC code numbers of railway wagons from an image or video signal is a real advantage for international logistics operators. The Carmen® UIC recognizes the UIC codes with the highest recognition accuracy achievable. This enables railway system operators to access important data of the contents of each coach as well as date, time and location of the railway coaches themselves.

INTELLIGENT CONTROL SYSTEMS FOR RAILWAY OPERATORS

RAILWAY LOGISTICS

BORDER CONTROL CUSTOMS

INVENTORY MANAGEMENT AT LOGISTIC CENTERS

RAILWAY CARGO DATABASES

MAIN BENEFITS

- Automated UIC code reading saves time and resources
- Increasing railroad safety by providing continuous, real-time traffic data
- Market leader high accuracy and recognition rates
- Smooth and maintenance-free 24/7 operation

TOWARD THE FUTURE IN SAFETY − SINCE 1991

SPECIFICATIONS

• straightforward use • hardware independent • multi format image input • motion detection • scalable • high accuracy

Special cameras are available for higher quality images and recognitions rates.

GENERAL INFORMATION

Purpose	Automatic recognition of the railway vehicle ID numbers – a UIC wagon/coach number recognition software for various intelligent railroad management systems
Supported Operating Systems	Windows (32/64 bit) Linux (32/64 bit)
Supported Platforms	x86_32 | x86_64 | ARMv7 | Cortex A8 and above
Minimum System Requirements	1 GHz CPU | 512 MB RAM | 1 GB HDD | free slot for NNC
Licensing	One license per application thread, multiple license/controller is available One year from purchase included, optional subscription available on yearly basis
Available Neural Controllers	USB 2.0 dongle - type A USB internal 4-pin PCIe card (X1) Mini-PCIe card

INTERFACE

Input	Still image from file or memory in various image formats (BMP | PNG | JPEG | JPEG2K | RAW) Live analog video input (PAL or NTSC) Live digital camera input
Output	OCR data UIC number in ASCII text Position of the UIC code Confidence level in percentage Confidence level for each character ID of the best image
Trigger	Can be integrated with any trigger device (recommended when recognizing from live video stream) Software motion detection module is included

DEVELOPMENT TOOLS FOR EASY INTEGRATION

Supported programming languages under Windows	C/C++, C# Visual Basic .NET Java
Supported programming languages under Linux	C/C++, Java
In The Box	Development libraries: .dll, .so files Demo application, sample codes for each programming language Neural network controller Comprehensive digital documentation

Technical specifications are subject to change without prior notice. This document does not constitute an offer.

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