



User manual

CAR-READER 3

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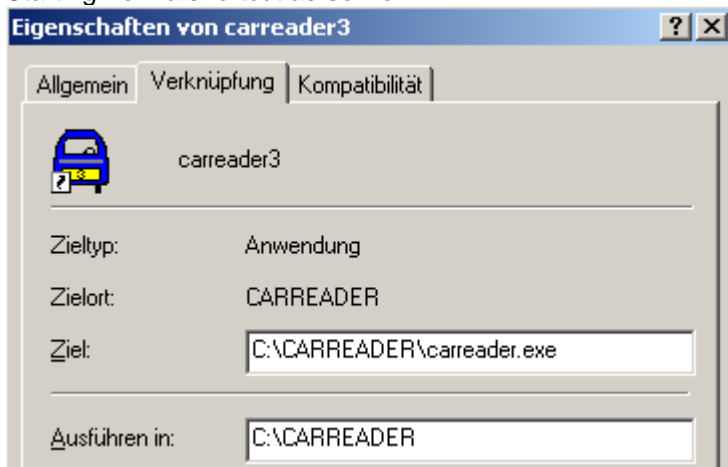
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Starting

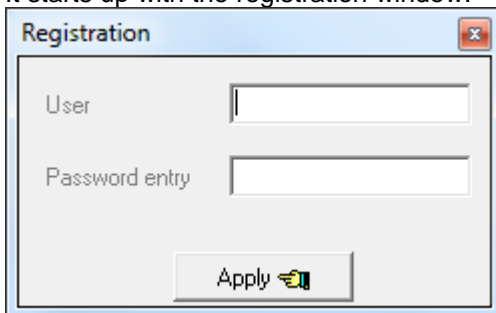
The CAR-RAEDER 3 is an executable program (carreader.exe) and is started as server or client.

Starting from a shortcut as **server**:



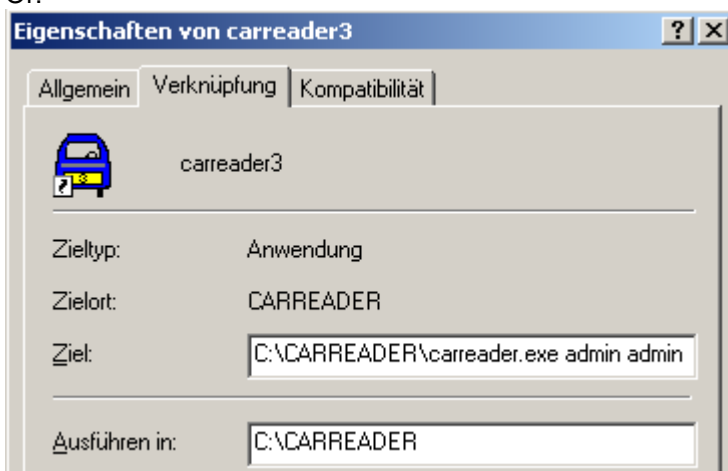
Target: carreader.exe

It starts up with the registration window:



Standard user: admin
Password: admin

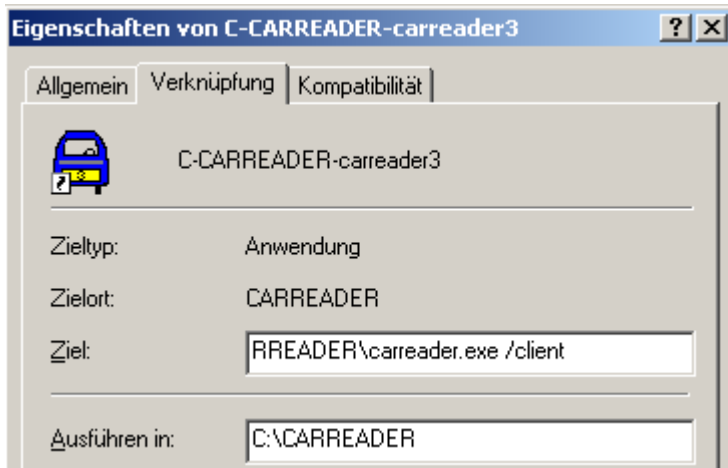
Or:



Target: carreader.exe admin admin

The program is started with the user admin. This skips the registration window!

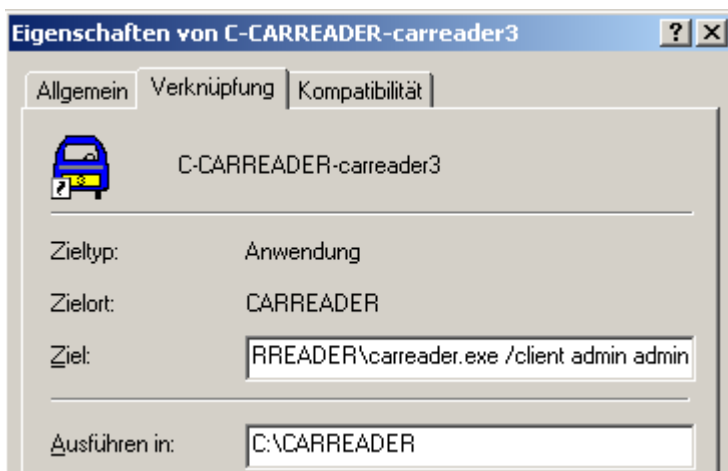
Starting from a shortcut as **client**:



Target: carreader.exe /client

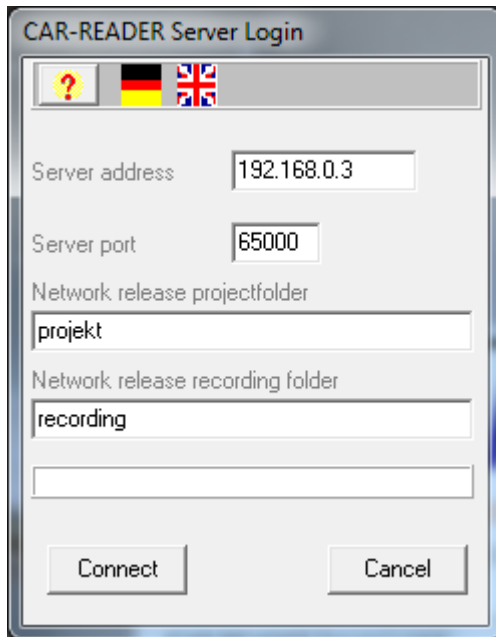
Hint: there is a space between "...exe" and "/client"

Or:



Target: carreader.exe /client admin

Then the interface for entering the server data opens:



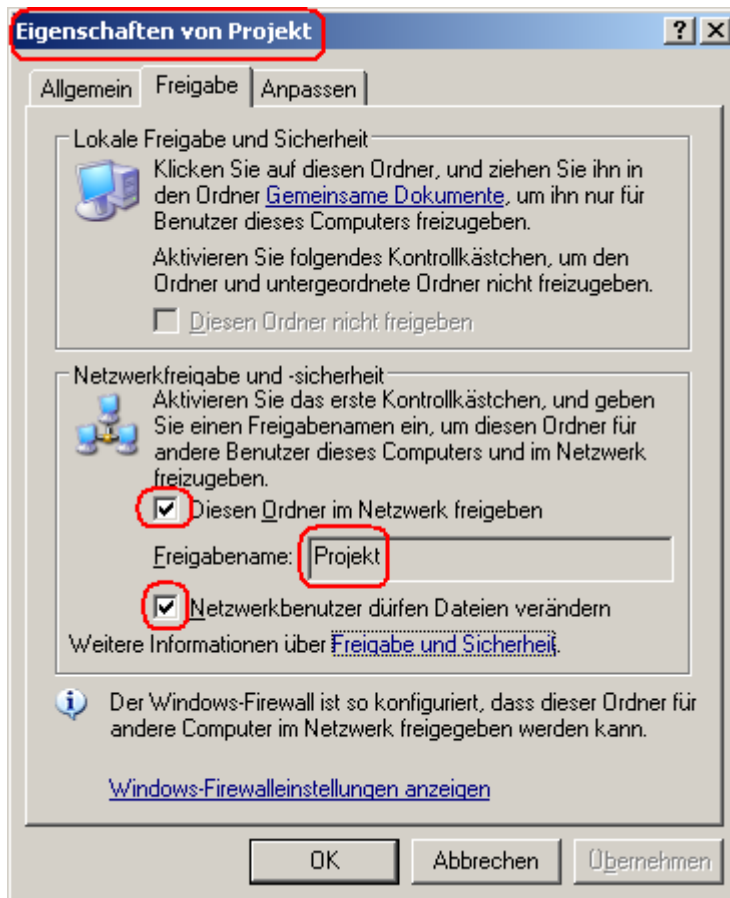
The screenshot shows a Windows-style dialog box titled "CAR-READER Server Login". At the top, there is a language selection bar with a question mark icon, a German flag, and a British flag. Below this, there are four text input fields: "Server address" containing "192.168.0.3", "Server port" containing "65000", "Network release projectfolder" containing "projekt", and "Network release recording folder" containing "recording". There is an empty text field below the recording folder. At the bottom, there are two buttons: "Connect" and "Cancel".

The access from the client PC to the data of the server PC is done by a Windows release with writing rights. ---To access the server PC from the client PC you must share the program folders on the server PC and allow others to change the files.----

Server address:	The IP address or the name of the PC, on which the CAR-READER server is installed.
Server port:	The port which is configured in the client configuration of the CAR-READER server.
Network release project:	This Folder (the project folder) must be shared and allowed to be changed by others.
Network release recording:	This Folder (the recording folder) must be shared and allowed to be changed by others.

Hint to network sharing:

In a standard installation the project folder is C:\CARREADER\Project. This folder <Project> has to be shared with **writing rights (allowing others to change the files)**:



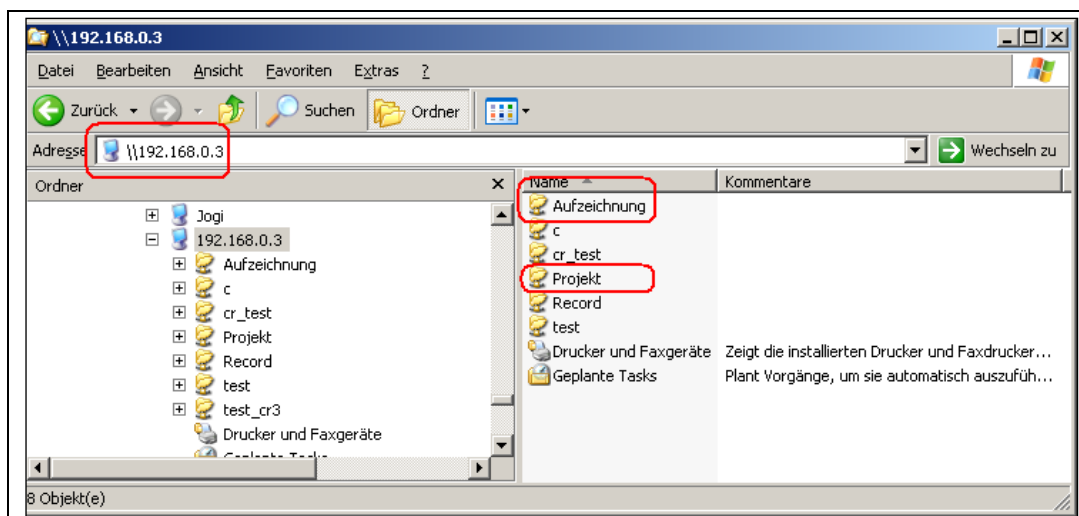
(Windows XP, German)

The same situation is with the recording folder.

Test of the sharing:

On the client PC type in the IP address of the CAR-READER server PC in the Windows explorer address field.

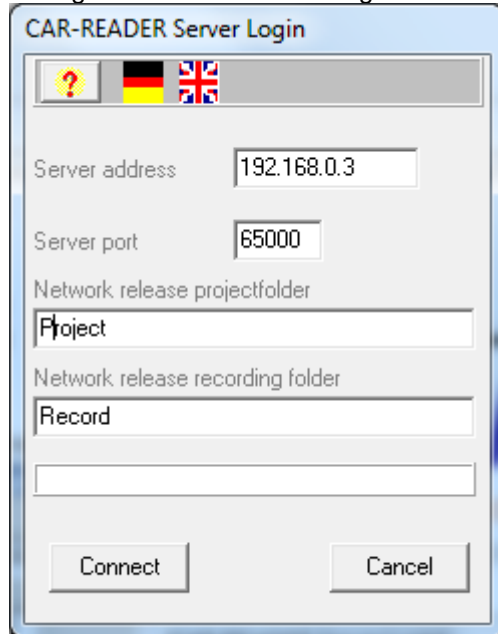
At the right side the shared folders should be shown without any Windows password.



Example: The installation folder is not shared. The Project- and Record folder was shared as "Project" and "Record" :



Configuration in the server Login interface:



When problems arise please check the shared folders at file settings!

First steps

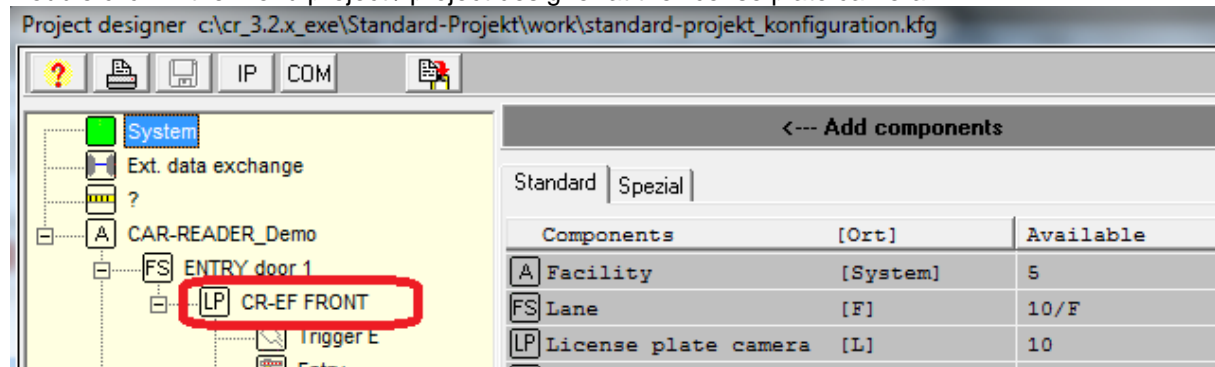
In the following, the (software-based) configuration steps in the CAR READER are described so that after the recognition of license plates, the barrier opens automatically.

This requires a proper installation of the camera and the IO / module in the network and connection of the sensor to the IO / module.

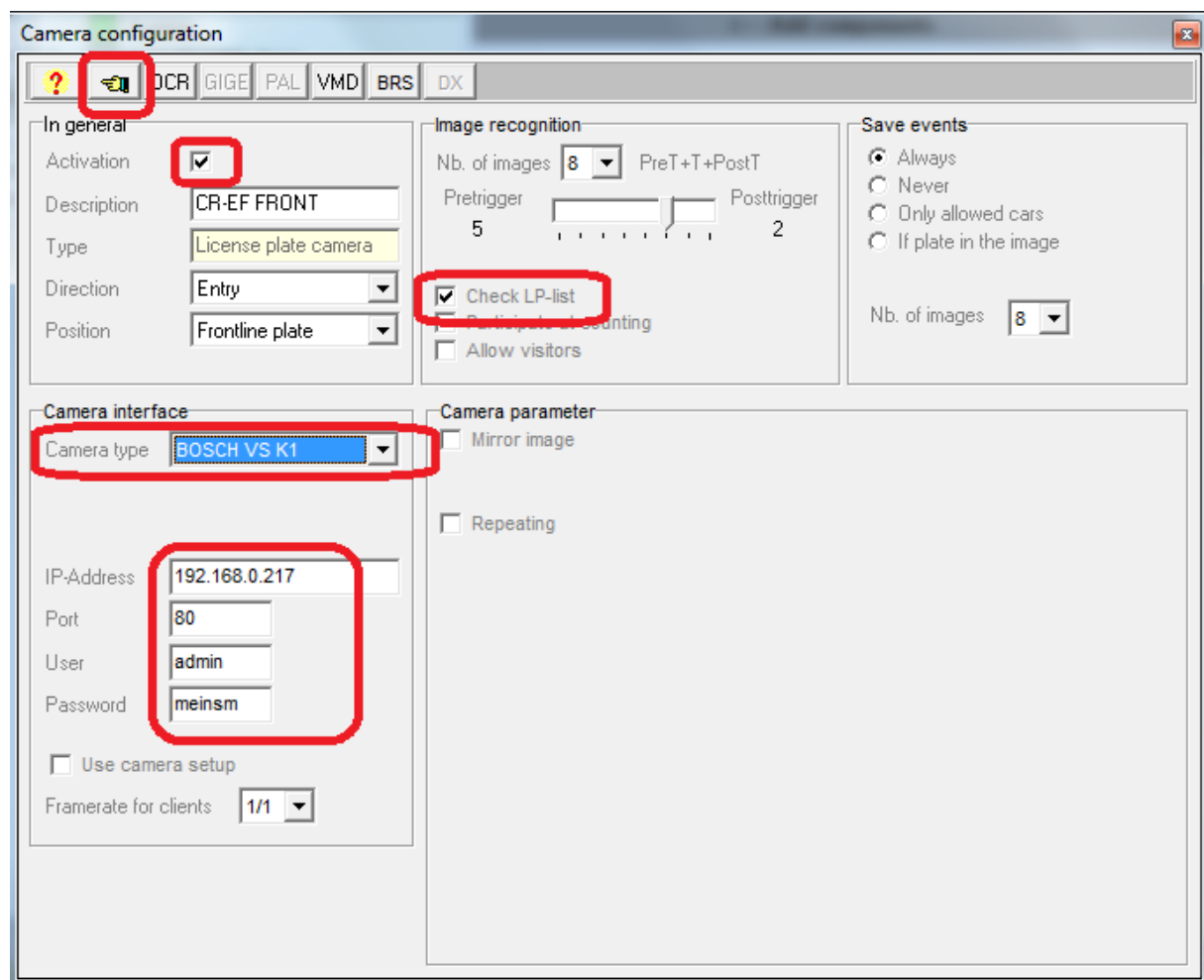
The CAR READER comes standard with a traffic lane.

Configure a first project

Double click in the menu project / project designer at the license plate camera:

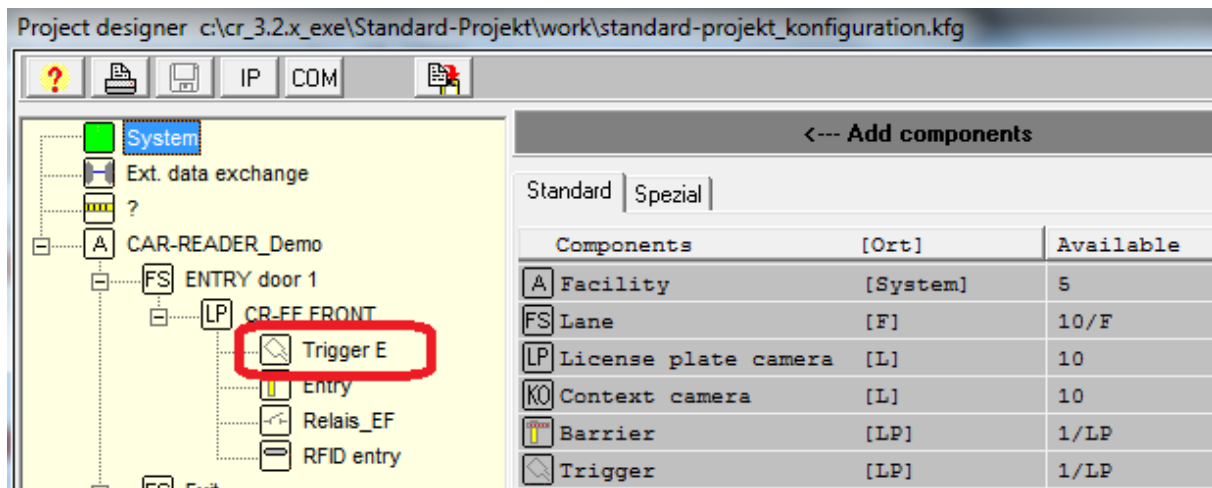


Settings in the window "camera configuration":

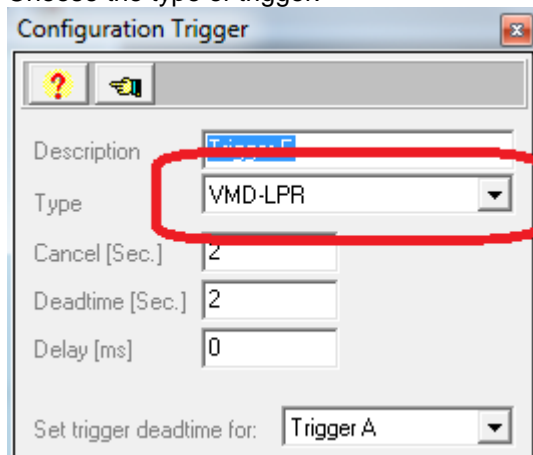


- Activate the camera
- Check LP list
- Enter camera settings: camera type, IP address, user and password of the camera
- Button "Back to saving" and press in the project designer the button "Save".

Double click at the trigger symbol:



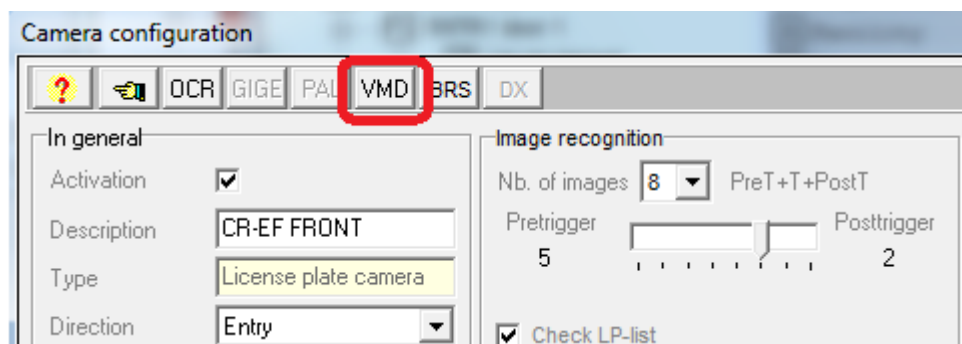
Choose the type of trigger:



For first tests choose video motion detection (VMD-LPR).
Press the button "Back to saving" and then the button "Save".

Restart the CAR-READER!

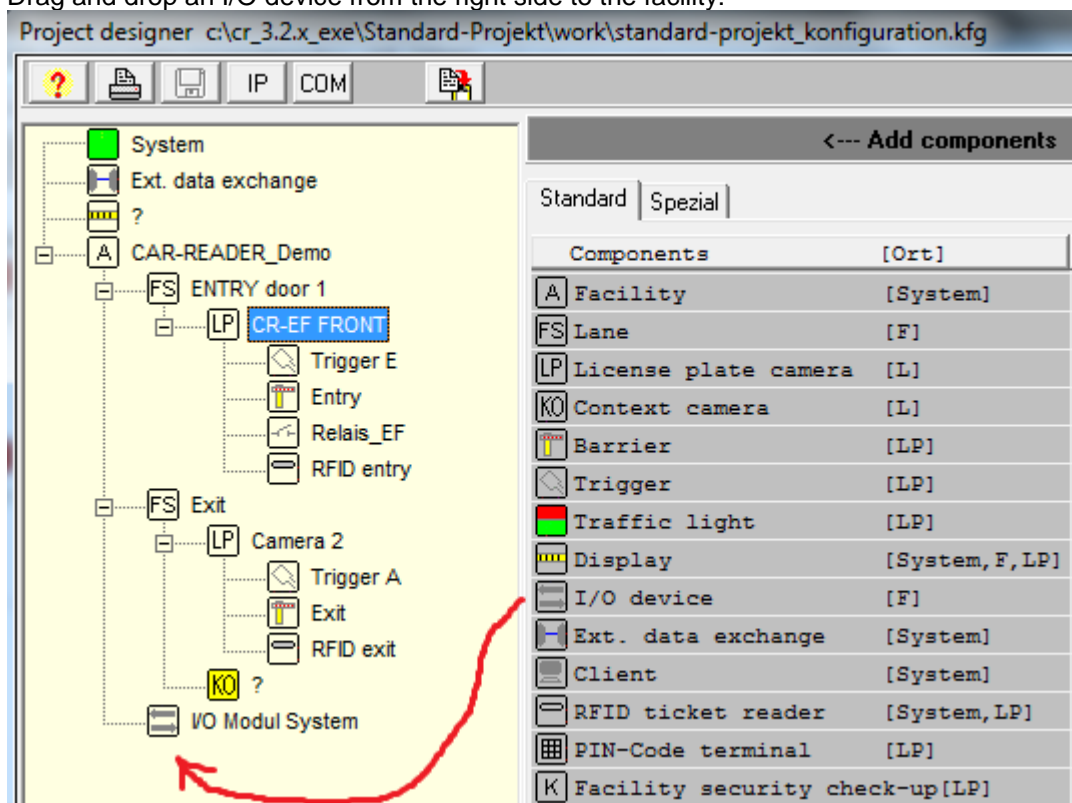
Open again the camera configuration and activate the video motion detection:



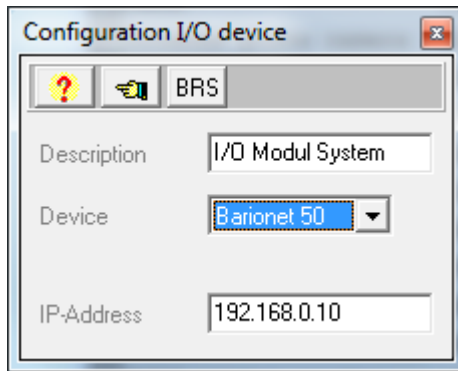


- Draw a rectangle while holding the left mouse key
- Choose the sensitivity
- Save the settings

Drag and drop an I/O device from the right side to the facility:

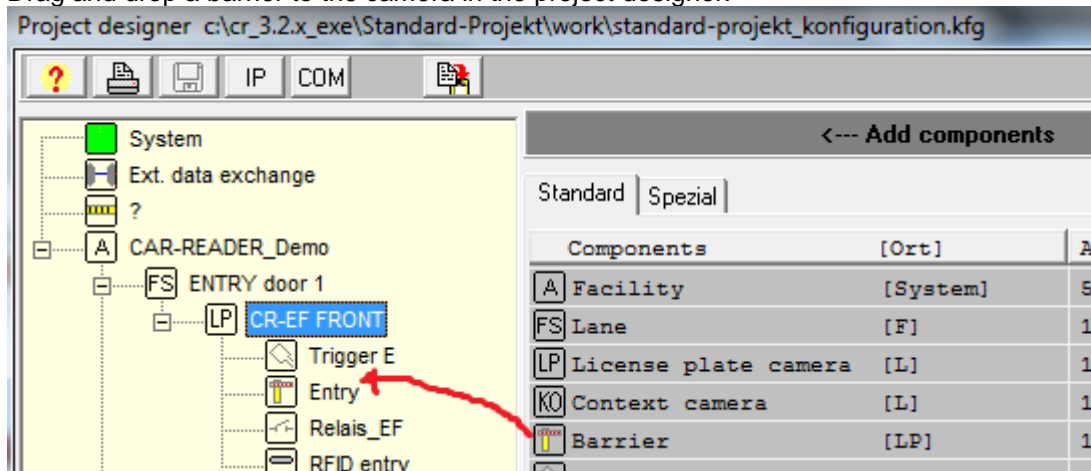


Double click on the icon to open the configuration window:

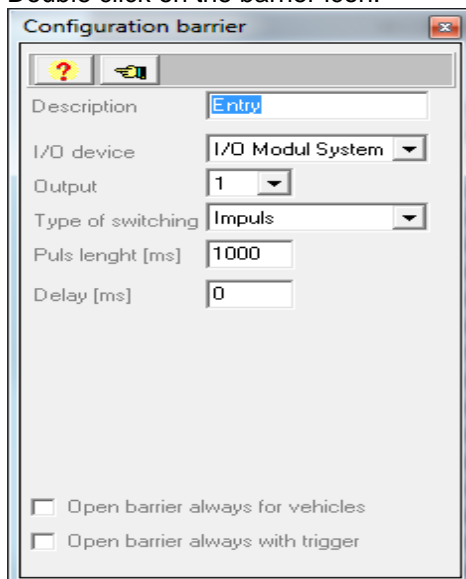


- Choose type of device
- Assign description
- Enter IP address
- Confirm and save in the project designer.

Drag and drop a barrier to the camera in the project designer.



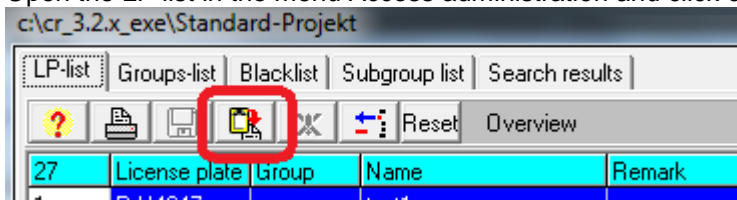
Double click on the barrier icon:



- Assign description
- Choose the type of I/O device
- Confirm and save in the project designer.

Create a LP list

Open the LP list in the menu Access administration and click on the button “New entry”

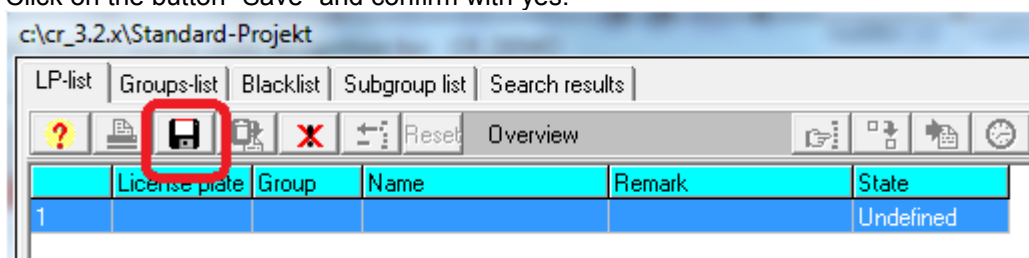


Type in the data on the right side.

Name and license plate are mandatory.

For proper operation the license plates must be unambiguous.

Click on the button “Save” and confirm with yes:



Now the plate is stored in the system:

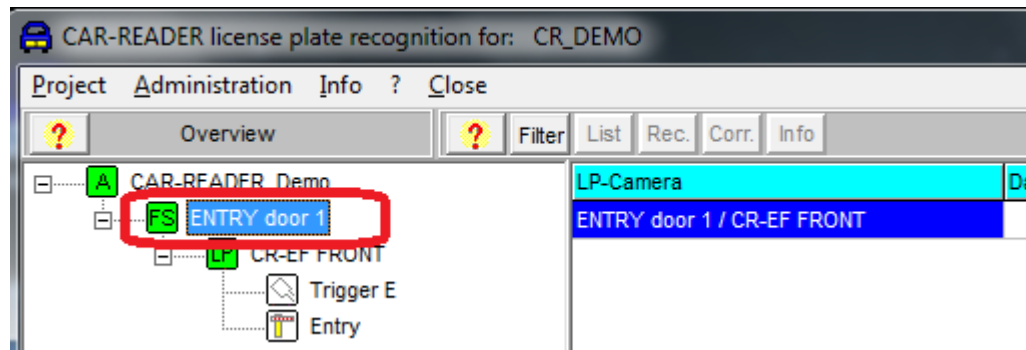


As soon as the plate is recognized the barrier will be opened, because we haven't defined any restrictions.

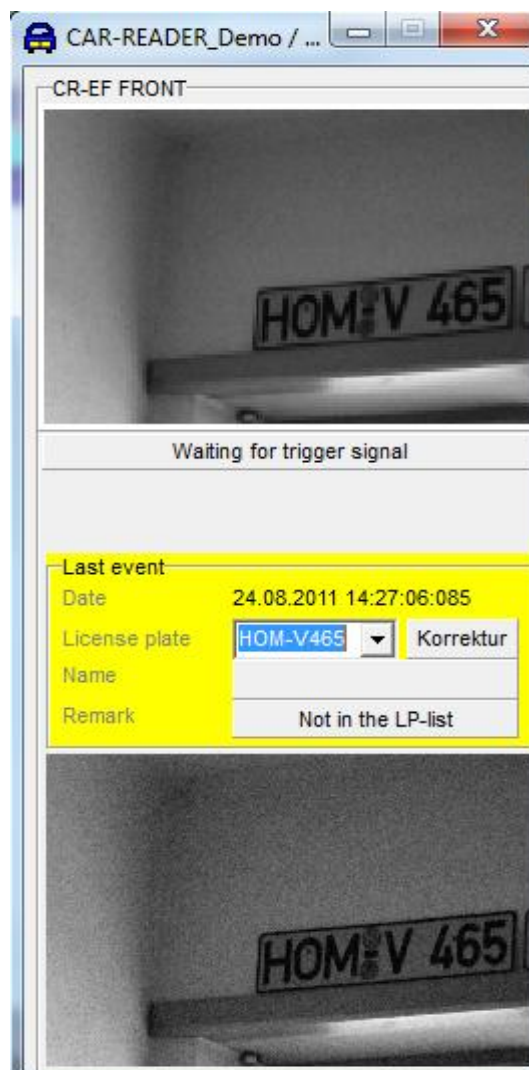
Check the recognition

Regardless of the presence of a barrier the recognition can be checked:

Requirement: You need a live image



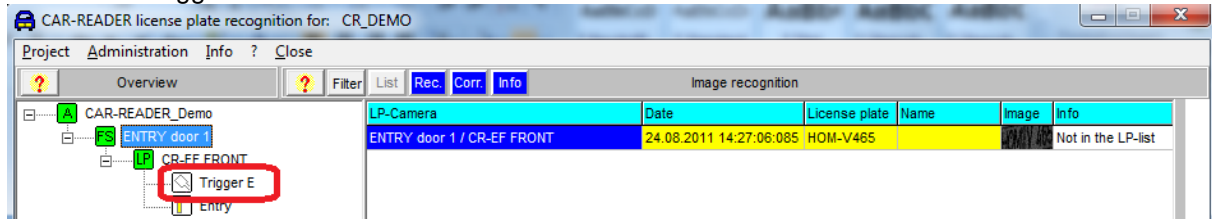
Clicking on the lane icon (here: Entry door 1) opens the live image of that camera:
If not, all installations- and configuration steps has to be checked!



Live image

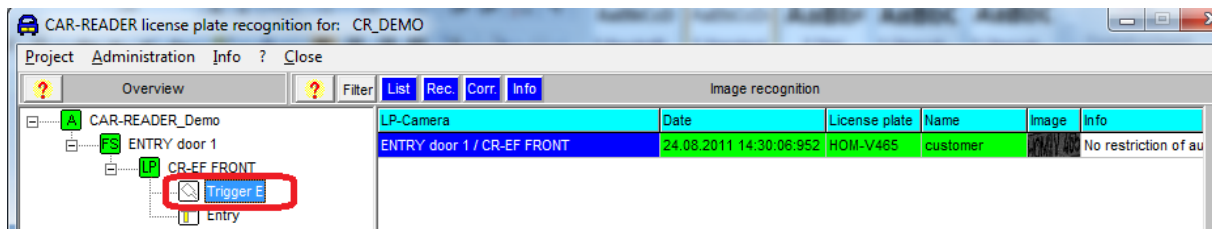
Here the last event is displayed

Click on the trigger icon:



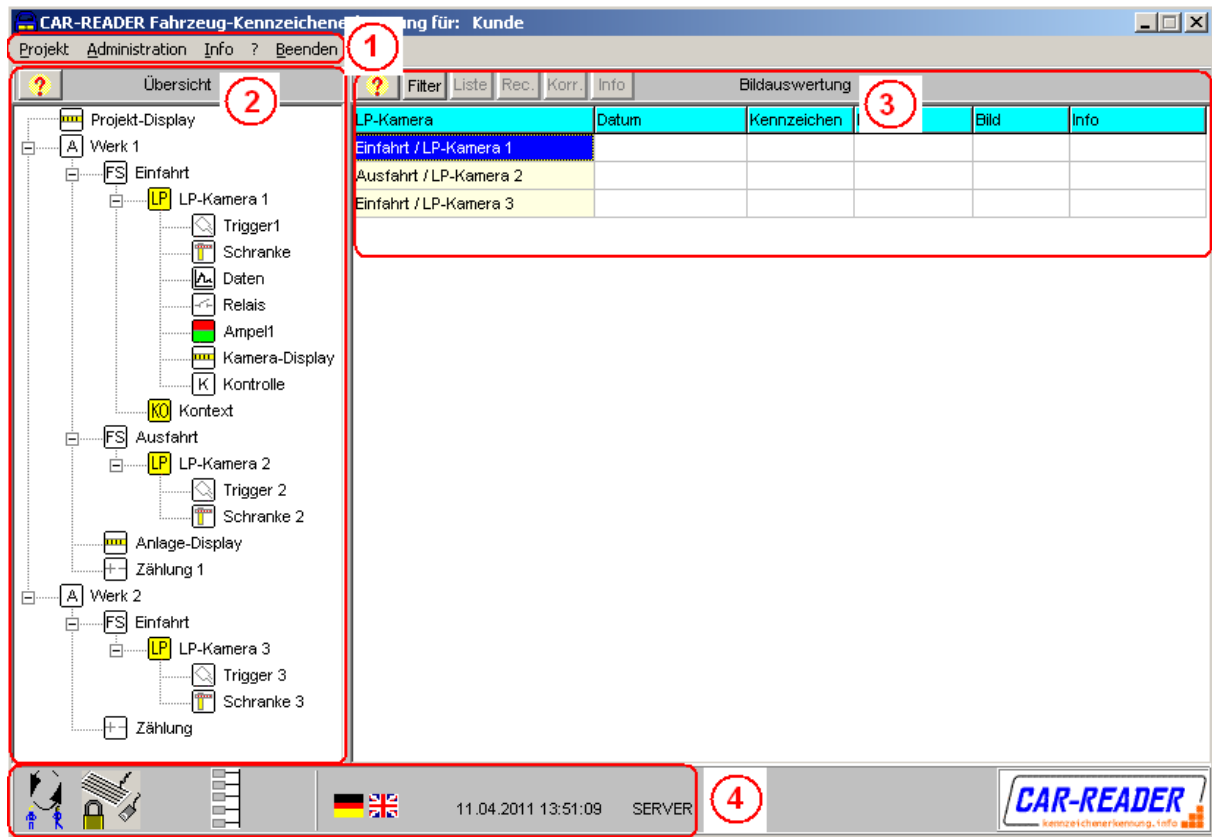
The recognition is started manually and on the right side of the screen in the area "image recognition" the reading result is displayed and is marked in yellow: this means that the plate is not in the list.

After storing the plate in the LP list and releasing of a trigger, the read result will be displayed in green colour: this means valid.



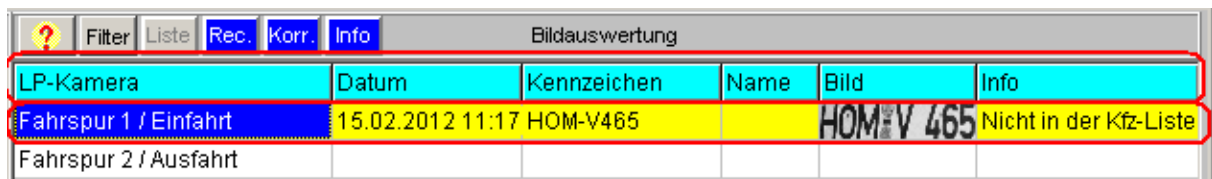
Main interface

In the main interface of the CAR-READER the daily work is done.
Prerequisite is creating and configuring a project in the project designer (Menu project).



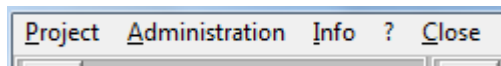
- 1: Menu bar
- 2: Window "Overview"
- 3: Window "Image recognition"
- 4: Status bar

Click with the right mouse key:



- in the headline: It appears the context menu „font size“
You can change the character size of the image recognition area
- in the result line at an unknown plate (yellow marked):
It appears the context menu „Into the whitelist“, „Into the blacklist“
When choosing the license plate list is opened in the mode „New entry“. You have to add at least a name.

Standard menu bar:






Overview over the menu bar		
Menu	Submenu	Task
Project		Creating and configuration the structure of projects in the project designer.
Administration	Recording	Administration of the system and of the files.
	Access administration	
	Troubles/Actions	
	Counting	
	Statistics	
	User administration	
	System analyses	
	Visitor administration	
	Present vehicles	
Info		Display of the version number, implementation, license key, manufacturer, distributor
?		Online help texts
Close		Finish the program.

Overview

The overview tree on the left side shows all components of the systems and their relation. The creation and configuration of the system is done in the project designer where you will find the explanation of the symbols.

Colored marks show the state:

-  Trouble
-  OK
-  Not activated

With the +/- switches the tree can be displayed more clearly.

In the overview tree the following actions are possible:


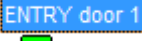
Object:	Action:
Lane	Open the live window of the corresponding cameras
Trigger	Manual start of a recognition
Barrier	Opens a barrier
Traffic light	Change between red / green
Alarm horn	Switch on / off
Facility control	Opens the facility control window
Display	Camera display: If static text was activated, a window opens to edit that text. Facility- and system display: Shows the displayed text .

Click on the entry for the camera display:

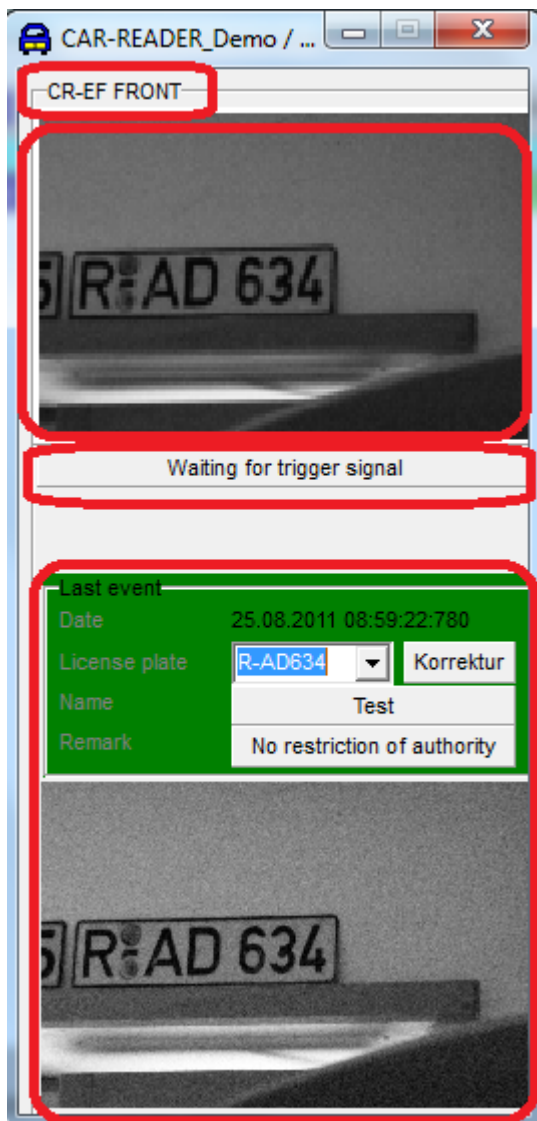
If the output of a static text is configured, a window opens to change the text or a hint is shown: „No static display output configured!“



Live window

To show a live stream from camera click on the symbol  

It will open the following window:



Name of the camera

Live image

Opens the buffer images







Last event

Click in the live image to show the full resolution of the live stream from camera.




Image recognition

In the window "image recognition" the last events are shown which correspond to the different cameras.

Colored marks of the corresponding row show the state:

-  Locked
-  No vehicle
-  Not in the list
-  No checking
-  Released by third party system
-  Released by CAR-READER

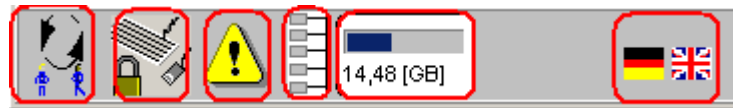
Colored marks of the column "LP camera":

-  Marked lane.
To this lane all buttons "List", "Rec.", "Korr.", "Info" refer to.
"List" button is released, when a recognized plate is in the LP list.
"Rec." button is released when a recording is done.
(The event recording is configured in the project designer)
-  →  At the marked lane a new triggering is executed.

Via the symbol bars you get fast access to corresponding functions (if released):

Button:	Action:
?	Opens the help file
Filter	Display filter for facility, lane
List	Jump to the entry in the LP list
Rec.	Jump to the entry in the recording data base
Corr.	License plate correction / barrier opening
Info	Informationen for image recognition

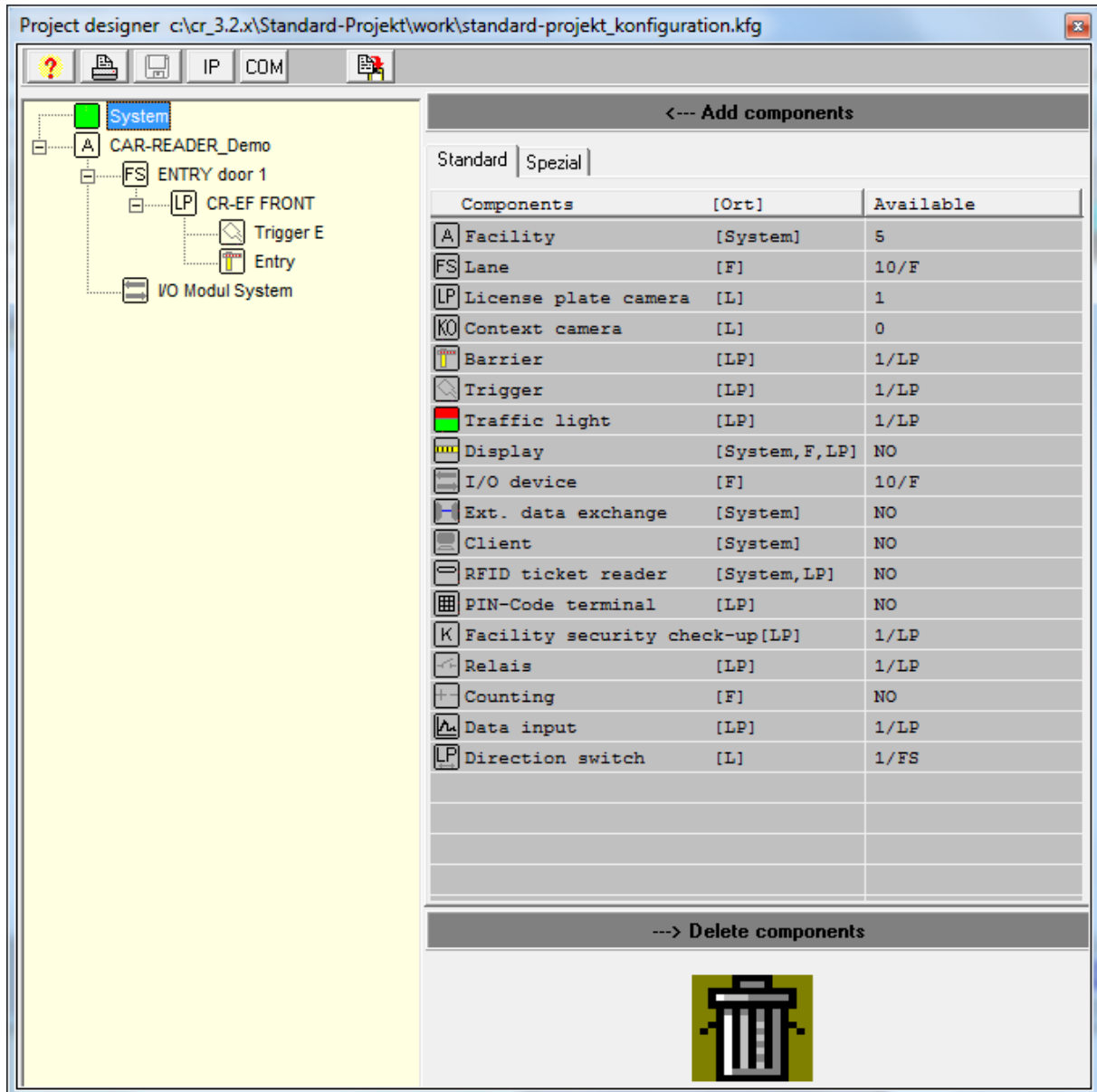
State bar



Symbol:	Function:
„Shift changel“	The registration window opens.
„Lock“	You have to register to be able to work with the CAR-READER again.
„Event list“	The window "Troubles/ Actions" is opened. Hint: the yellow exclamation mark (event) appears, if there is a new event/trouble.
„Clients“	Shows that the CAR-RADER is running as Client-Server and The number of clients.
„Free memory“	Shows the free memory for saving events.
Language flags	Change here between different languages.

Menu project

Via this menu you have access to the project designer, with which the whole system is designed and configured.



Drag and drop used components from the right component list into the left project field.
No longer used components should be dragged and dropped into the trash bin.

Column **Components**:

Comprises all components which are available in the CAR-READER system.

Column **[Ort=location]**:

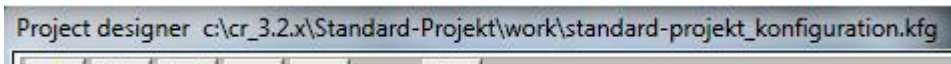
The location, where the components can be linked to.

i.e. trigger. Location: [LP]. A trigger component can only be linked to a license plate camera (LP).

Column **Available**:

The availability of the different components depends on the licensing and system requirements.

In the headline of the window you will find the directory and name of the project file:



Symbol bar



Opens the online help (this manual)



Prints the complete project list.



Saves the created project with all the done settings.



Opens the list of IP addresses and ports of all network devices and connections.



Opens the list of serial connections: COM-Ports



Load the last Backup

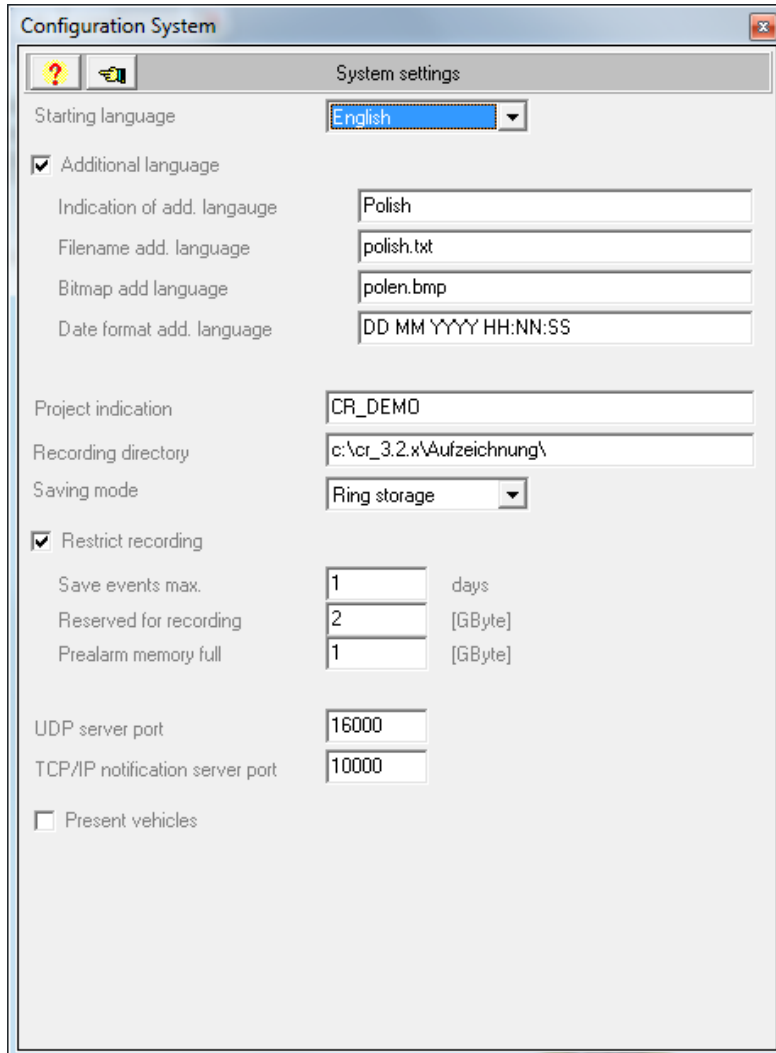
When opening the project designer a configuration backup is created. (*_konfiguration.bak). You can load it with this button.

Configuration of the different components

Double clicking on a component in the left field opens the corresponding configuration window.

System

Fundamentally settings are made here:



Starting language

Changes the language, with which the CAR-READER should start

Additional language

After activation you will be able to add a third language with the next four fields.

You need three new files:

- Flag bitmap (*.bmp)
Size 20x16. Directory : <installation directory>\WORK\
- Text file (*.txt): Translation of the file cr_deutsch.txt
location: <installation directory>\WORK\
- Text file (crv_*.txt): Translation of the file crv_deutsch.txt
Location: <installation file>\WORK\

Hint for crv*.txt:

Is the name of the third language „NewLanguage.txt“, then it is called „crv_NewLanguage.txt“.

Put always a **crv_** in front of the name of the new text file!

Notation additional language

Name of the third language

File name additional language

File name of the translated „cr_deutsch.txt“

Bitmap additional language

File name of the image of the flag

Date structure of the additional language

Sets the date structure of the third language.

Project notation

Sets the project name. This name appears in the blue headline of the main mask.

Recording directory

Sets the location for recording of the events.

For every year, month and day separate subfolders are created.

Storage mode

You can choose between ring buffer and stop.

Ring buffer

As soon as the storage medium is full the eldest entries will be overwritten.

Stop, if full

As soon as the storage medium is full no more saving is possible.

Limit recording

After activation the recording can be limited to the number of days or to available disc space.

Notice of memory being full

As soon as the designated memory is exceeded a warning is shown.

UDP server port

Is necessary for the communication with the IO module.

TCP/IP notification server port

The triggering can be released from an external system via TCP/IP command.

i.e. a truck scale triggers the CAR-READER if a truck is being weighed.

Another application is a camera with internal video motion detection, which triggers via TCP/IP notification the CAR-READER.

With the button "Back for saving" you get back into the project designer. The saving is then realized by clicking the save button.

OCR: Show unknown characters with ?

With the image recognition not recognized characters are ignored. Activating will show these with a ? in the license plate string.



Help

Opens the online help

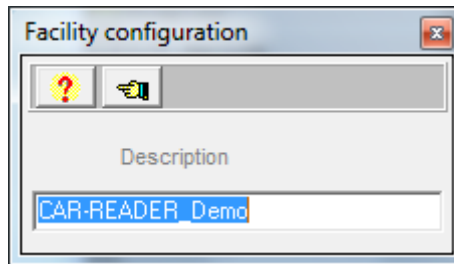


Back for saving

The real saving is done in the project designer.

Facility [A]

By double clicking you can assign or edit a name for the facility.



Opens this online help.

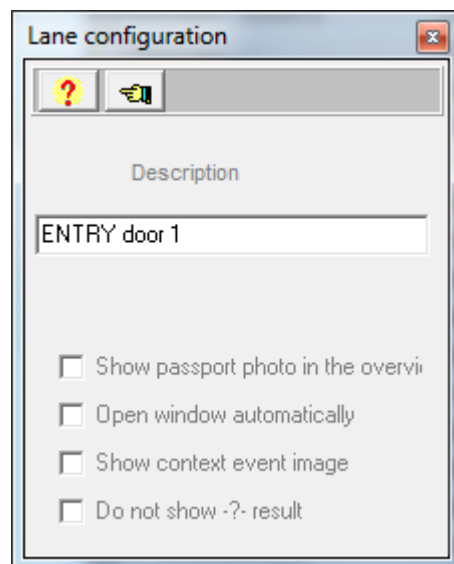


Back for saving.

The saving is then done in the project designer.

Lane [FS]

By double clicking you can assign or edit a name for the lane.



Show passport photo in the overview

If there are photos (of the driver or of the car) in the LP list corresponding to single plates, then they will be displayed in the overview window of the camera.

Open window automatically

If an event happens at a camera, then the overview window is automatically brought into the foreground.

Show context event image

If there is a context camera configured, then the corresponding image is displayed.

Do not show -?- result

Recognition results which can not be recognized are ignored.



Opens this online help



Back for saving.

The saving is then done in the project designer

License plate camera [LP]

Double clicking opens the window to the camera configuration

The screenshot shows the 'Camera configuration' window with the following sections and settings:

- Navigation tabs:** ? (Help), OCR, GIGE, PAL, VMD, BRS, DX.
- In general:**
 - Activation: ☒
 - Description: CR-EF FRONT
 - Type: License plate camera
 - Direction: Entry
 - Position: Frontline plate
- Image recognition:**
 - Nb. of images: 8
 - PreT+T+PostT: 5 (Pretrigger), 2 (Posttrigger)
 - ☒ Check LP-list
 - ☐ Participate at counting
 - ☐ Allow visitors
- Save events:**
 - ☒ Always
 - ☐ Never
 - ☐ Only allowed cars
 - ☐ If plate in the image
 - Nb. of images: 8
- Camera interface:**
 - Camera type: SANYO 2300
 - IP-Address: 192.168.0.2
 - Port: 80
 - User: admin
 - Password: admin
 - ☐ Use camera setup
 - Framerate for clients: 1/1
- Camera parameter:**
 - ☐ Mirror image
 - ☐ Repeating
 - ☐ Framerate
 - ☐ AGC control

In general

Activation

The image recognition is only available after activation

Description

Name of the camera.

Type

Is set by the system: license plate camera or context camera.

Direction

If you are managing the presence of a vehicle then entry and exit should be set correctly.

Position

Trucks can have different plates in the front or at the rear. Some applications capture front or rear plates with two different cameras.

Image recognition

Number of images VT+T+NT

You set here the number of images for image recognition. Standard and maximum is 8.

Pretrigger/ Postrigger

Every image recognition is triggered.

You can define the number of images before the trigger event and after the trigger event.

We recommend for performance reasons to operate with pretrigger images.

I.e. Number of images = 8. Pretrigger (VT) 7, trigger image (T) 1, post trigger (NT) 0.

The pre- and postrigger images can be shown in the buffer image window, which is opened by clicking on "Waiting for trigger signal" in the live image window.

Check LP list

Standard: activated.

Only after activation the profiles and restrictions corresponding to the plates are checked.

Participate on counting

If a counting module in the facility is configured, then that camera can participate on that counting by activation.

Allow visitors

This is necessary if you want to work with "visitors" who are defined in then submenu "Visitor administration" in the administration menu.

No tolerance/ one character tolerance / two character tolerance

The recognized plates have to be identical or should match except one or two characters with one of the stored plates in the white list.

Save event

Always

Independent of the recognition result an event is stored with every triggering.

Never

No events are stored. i.e. for data protection reasons.

Only if allowed

The event is only stored if the recognized plate is in the LP list and if there are no restrictions.

If any plate is recognized

The event is stored if the any plate was recognized to show a car is present.

Number of images

Every event is stored with a file of data and images. For every event you can store up to 8 images from that camera.

Present cars

you can activate this camera for counting in the list „present cars“.

Only allowed: Only plates from the white list will be taken..

All vehicles: all cars which cause an opening of a barrier will be taken.

This is only useful for facilities with entry and exit.

Camera interface

Camera type

You can choose here the camera manufacturer.

IP -address

The IP address of the camera.

Port

This value correspond the the port defined in the camera.

Standard: 80

User and password

The access data stored in the camera

Framerate for clients

To reduce the network load you can decrease the framerate of the liveimages to the clients.

Camera parameter

Dependent of the chosen camera different parameters are shown to set.

Mirror image

Internal frame grabber present a mirrored image. Overhead mounted cameras too.

Half frame

Only available by frame grabbers.

Reply

Number from 1 till 8

The image recognition is repeated.

Frames/Sec.

The frame transmission ratio

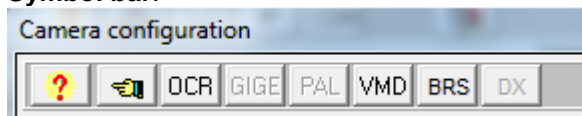
AGC-control

Refers to settings for the Sanyo camera



For explanation see the technical manual.

Symbol bar:



Opens this online help.



Back for saving.

Saving is then done in the project designer



OCR configuration



Configuration of GIGE-Vision cameras (net yet realized).



Configuration of analogue cameras which are connected via frame grabber to the system



Configuration of the Video Motion Detection (VMD)



Start the browser of the camera



Configuration of DirectX-cameras



Configuration of Sony-cameras

OCR configuration:
Timeout:

Maximum time available for analyzing a picture.

The routine that analyses the picture will be canceled without rendering a result as soon as this time limit is reached.

This break condition will be ignored if the value is set to 0. Instead the picture analysis is continued until it is concluded normally.

Min. and maximum character height

In order to exclude especially small and especially large characters from the analysis, a minimum and maximum character height may be defined. These settings are ignored if set to 0.

Character distance

To define the setting of the dash you can adjust the standard value of 65.

I.e. Polish plates need a value of 50.

Maximal distance

Defines the distances between the recognized character groups.

If the maximal distance is exceeded, the group on the left or on the right is ignored.

I.e. the result "D M AB123" shows that the country sign D is recognized as part of the plate.

Choosing the correct value will ignore that character D.

Character correction:

The recognized license number string is scanned for distinct structures, i.e. the program routine searches for gaps between the characters and the areas found are sorted in groups. A German license number, for example, is broken up in two parts by the TÜV symbol (a sort of seal by a technical inspection authority certifying the roadworthiness of the vehicle) to the left of which only up to 3 letters are allowed but no digits.

In France, this left substring contains up to 4 digits but no letters. If the program finds 3 digits and one letter in it and character correction is set, the (wrongly) identified letter is converted into a digit.

This applies, however, only to the following similar looking pairs of characters:

Z → 2, S → 5, I → 1, B → 8, A → 4, G → zero, Q → zero, O → zero, D → zero

The other way round the following pairs are used for conversion:

zero → G, 1 → I, 2 → Z, 4 → A, 5 → S, 6 → G, 7 → T, 8 → B

Two lines

Not all license numbers consist of only one line of characters. With the option 'two lines' deactivated, the license number in the picture would be identified as AD-345. However, if 'two lines' is enabled, the software will also scan the area above the initially recognized "AD 345" for characters and combine the results to one complete license number.

This option may, however, also have its drawbacks: It requires increased computing power and implies the danger of faulty recognition results, as there also symbols on the first line that may be misinterpreted as characters.

Allow inverse

It is first of all the older number plates that do not comply with the general standard. Usually, number plates have black characters on a white background. Some older plates, however, are inverted, i.e. have white characters on a black background. If the 'Allow inverse' option is selected, the CAR-READER program first tries to find a standard license number (black characters on white background) in the picture, and then tries to read white characters on a dark background.

Allow blue

In Austria some types of number plates are not black on white but white on a light blue background. In addition to the fact that these plates are inverse, the difference in contrast between white and light blue is very little.

Clicking the 'Allow blue' option instructs the system to analyze only the blue channel of the picture, if a first reading attempt fails.

German Syntax

As opposed to Austria, German number plates follow a well-defined structure. The first letter stands for the district and is followed by one or two letters, which are again completed by up to 4 Numbers. If German Syntax is clicked, the recognized district is matched against the data stored in the districts.txt file. If the further structure can be decoded, similar looking signs will be corrected using the list of pairs above. Even the typically German umlauts are inserted.

Austria syntax

the Austrian specialties are used.

ISR Syntax

Israeli plates consist of exact 7 digits.

Results with 7 digits are prioritized.

Dash

If 'Dash' is selected, the first space discovered in the string is replaced by a dash.. This is especially helpful to distinguish between very similar looking number plates, e.g.:

A-BC123 from AB-C123.

Only digits

Changes all into ? without digits.

Further: Z into 2, S into 5, I into 1, B into 8, A into 4, G into 6, Q into 0, O into 0, D into 0

Ziffern und Buchstaben

Recognition results which contain only digits or only characters are ignored.

Administration

Checks the plate if it belongs to a special city.

OCR area of interest

Live / JPEG image

you can choose between live image from the camera or load a special image.

Area of interest / masking

With this function you can reduce the area of interest in which the plate is expected.

You draw a rectangle by holding the left mouse key.

The coordinates are then displayed below the image.

The origin is in the left upper corner.

Mouse action

If you want to set a rectangle, you have to choose before "recognition area" or "masking".

Total

Releases the restriction

Set

Take the written coordinates.

Clear

Release the masking.

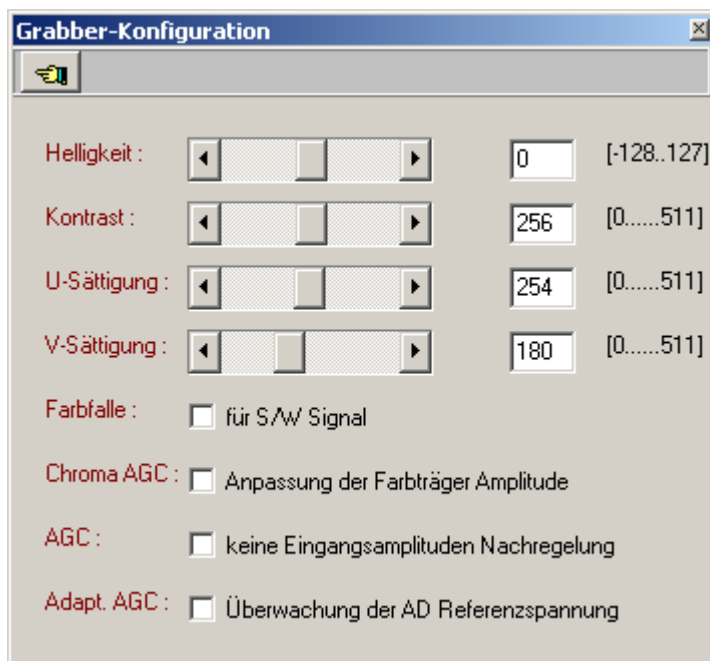
You have to save the settings in the project designer!



Configuration of GIGE-vision cameras



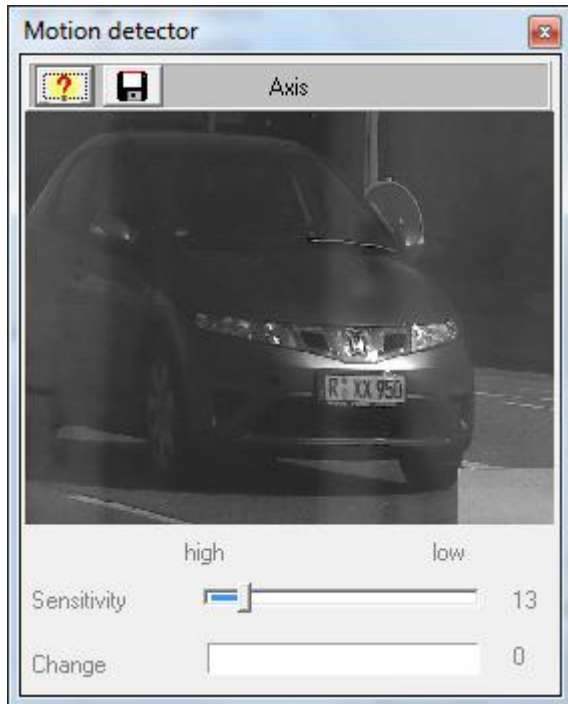
Configuration of analog cameras



Here you can set the parameters of an internally build in grabber card.

Configuration of the Video Motion Detection (VMD):

This button is released if the trigger to that camera is set to VMD-LPR.



Press the left mouse key and draw a rectangle to define a field for evaluation. If the changes of pixels within this field overstep a defined threshold then a trigger is released.

Setting of the sensitivity:

A value between 0 and 100 is possible.

Small values: Very high sensitivity. Already a few changes of pixels will release a trigger.

Large values: Less sensitivity. A lot of pixels have to change to release a trigger.

The row below shows the current value of the sensitivity

Oversteps the current value the set sensitivity then the row becomes red and a trigger is released.

Starting the browser

Clicking here will bring you to the webserver of the camera.

Context camera [KO]

By double clicking, the window for configuration is opened.
The settings correspond to a license plate camera.

Configuration context camera

☐ ? ☐ GIGE ☐ PAL ☐ VMD ☐ BRS ☐ Sony

In general

Activation ☐
 Description
 Type

Camera interface

Camera type
 IP-Address
 Port
 User
 Password
☐ Use camera setup
 Framerate for clients

Save events

Nb. of images VT+NT+T
 Delay msec
 Pretrigger Posttrigger

Allocation to LP-camera

☐ Axis
☐ Activate VMD

Camera parameter

☐ Mirror image
☐ Repeating
☐ Framerate

See [camera parameter of the license plate camera](#) (LP-camera).

Allocation to a LP camera

If you have more than one license plate camera configured then you can assign the context camera here.

Activate VMD

After activating VMD the button VMD is released. See one page above for explanation.

Barrier

By double clicking you can open the window for the barrier configuration.

Description

Name of the barrier

I/O device

Before configuration of a barrier you have to activate an I/O device.

Output

The output number of the I/O device, to whom the barrier belongs

Type of switching

- Impulse

Impulse duration [ms]: Time of the power which is set from the CAR-READER [ms]:

- Input dependent

The output is switched as long at the barrier as the upcoming input event happens.

Timeout (Sec.): Cancels the process if exceeded.

Application: the barrier opening is then dependent of another event i.e. a loop detection.

Pulse length [ms]

Standard: 1000 milliseconds.

Delay [ms]

Time of the delay in milliseconds.

Open barrier always for vehicles

As soon as a plate is recognized the barrier is opened (independent of authorities)

- Exit possible until (1 – 24 hours)

An exit camera is then configurable that the barrier remains closed if an unknown plate is longer than x hours present.

Barrier opening always for trigger

As soon as a trigger is released the barrier is opened.



Opens this online help.



Back for saving.

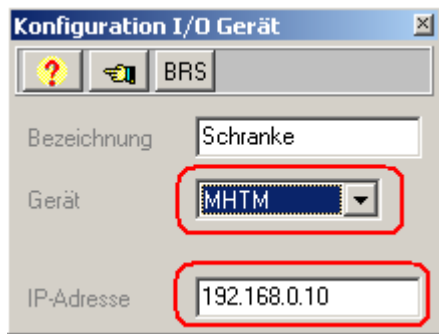
The saving is done in the project designer

Hint:

Connecting of the network barrier MHTM MicroDrive of MAGNETIC AUTOCONTROL

Set the project designer component I/O device to MHTM

Die Projektdesigner-Komponente I/O-Gerät auf MHTM konfigurieren und die IP-Adresse eingeben:



You have to assign this device then in the configuration of the barrier.

Trigger

The window for trigger configuration is opened by double clicking.

Configuration Trigger

Description: Trigger E

Type: Ext. TCP/IP Notification

Cancel [Sec.]: 2

Deadtime [Sec.]: 2

Delay [ms]: 0

Set trigger deadtime for: [dropdown]

Ext. TCP/IP Notification

Message: Kamera0

☐ Send answer

Each image recognition has to be triggered.
Each LP camera needs its own trigger.

Description

Name of the trigger.

Type

Ext. TCP/IP notification

The triggering is released by a camera or a third party system via network.

Ext. TCP/IP Notification

Message: Kamera0

☐ Send answer

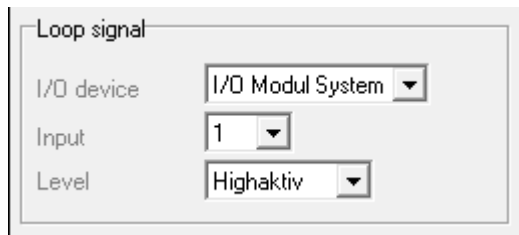
Message: The text, which the third party system sends as TCP/IP notification to the CAR-READER. This text have to be configured in the third party system.

Send response: Activate it if the CAR-RERADER should answer.

The correct protocol is described in the technical manual

Loop signal

The triggering is realized for example by a loop.
Requirement is the presence and configuration of an I/O device.



I/O device: All possible and already designed I/O devices are listed here.

Input: Physically connection of the loop to the I/O device. (Input number at the I/O-device).

Level: State of the power at the loop detector.

VMD

Video Motion Detection: The triggering is done by video motion.

After activation the button VMD is released in the window "camera configuration".

The fine tuning of the video motion is to do there.

If no vehicle is recognized (i.e. pedestrian) the trigger dead time is ignored after the image recognition.

Cancel [Sec.]

After releasing a trigger signal the number of images configured in "images after triggering" have to be caught from the camera.

After that all trigger images are investigated for license plate information.

Here the time is set in seconds after that the trigger process is canceled.

The released event is then discarded.

You will use it for very slow working cameras.

Dead time [Sec.]

Here the time period in seconds is set, after that a new trigger signal is possible.

The value zero means, that after the image evaluation a new trigger signal is possible at once.

Delay [ms]

In general a released trigger starts a new image process at once.

With the delay in milliseconds you can set up a trigger delay.

Set trigger deadtime for:

Locks the triggering of the choosen camera for the configured time.



Opens this online help.



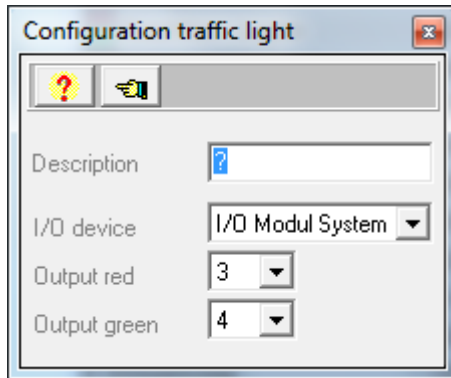
Back for saving.

The saving is done in the project designer.

The CAR-READER has to be restarted!

Traffic sign

Open the window to configure the traffic sign by double clicking.



Description

Name of the traffic sign.

I/O device

Here all already designed I/O devices are listed.

Output red

Output number at the I/O device for the color red.

Output green

Output number at the I/O device for the color green.



Opens this online help.



Back for saving.

The saving is done in the project designer.

Display

There are three different kinds of displays available:

System display:

It is connected to the component "system" and makes text output for the entire system.

Facility display: It is connected to the component "facility" and makes text output for this facility.

Camera display:

It is connected to the component "license plate camera" and makes text output for this lane.

Open the window for display configuration by double clicking.

System display

Description

Any text (max. 255 characters)

Display

Display the integrated displays types

- Display 10
- Display 20
- Lumino IBKLXII
- WIBOND
- WETELCO

Interface

Supports LAN or serial

Device address

Standard: 1

Number of rows

Is only valid for WIBOND displays if they support more than one line.

Dependent of the choice, one of the both blocks is released for input of the device configuration.

Serial: COM port, baud rate, parity, stop bits, data bits

LAN: Port (Standard 8000), IP address

In the right area you can configure the texts to display. In one row there is possible to have static text , in a second row the counting values of the facility if configured.

Static text

Any text (max. 255 characters)

Display of counting for the facility

Here is configured, what counting should be displayed.

Allocation to the row:

Here the chosen row is allocated to the static text (also flashing is possible) or to the counting values.



Opens this online help.



Back for saving.

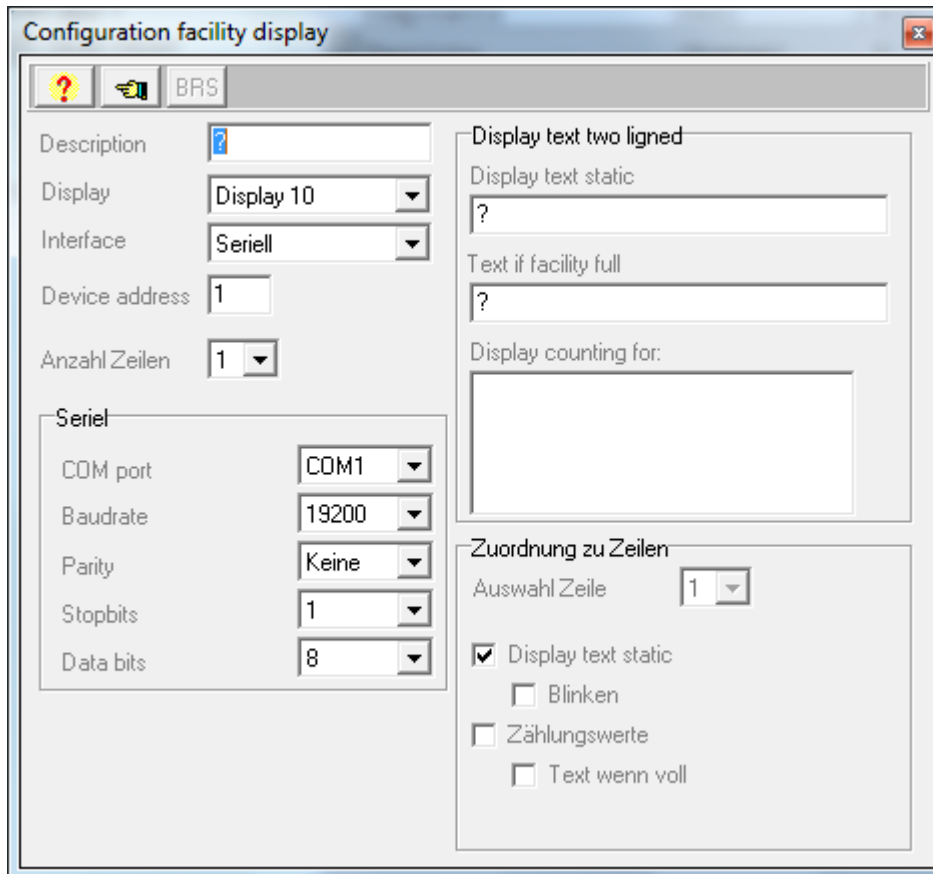
The saving is done in the project designer.



Starts the browser

If you use a network display the browser will be opened.

Facility display



The configuration is the same as for the system display. Additionally you can display a text if the facility is full.



Opens this online help.



Back for saving.

The saving is done in the project designer.



Starts the browser

If you use a network display the browser will be opened..

Camera display

You can assign to each license plate camera a display.

Description

Any text (max. 255 characters)

Display

Shows the implemented displays:

- Display 10
- Display 20
- Lumino IBKLXII
- WIBOND
- WETELCO

Interface

Support of LAN or serial

Device address

Standard: 1

Number of rows

Is only available for WIBOND displays if they support more than one row.

Depending on the interface, choose one of the blocks that appear for entering parameter settings.

Serial: COM port, baud rate, parity, stop bits, data bits

LAN: Port (Standard 8000), IP address

Dynamic texts

(Max. 255 characters text for 4 different system states). The text changes depending on the system state.

Text without vehicle [Idle]

Text after triggering [evaluation]

Text after barrier opening [qualified]

display time in milliseconds

Text without barrier opening [Not qualified]

display time in milliseconds

Static text

Any text (max. 255 characters). The displayed text is fixed.

Display texts

In the right area the used texts are configured.

In a row static or dynamic text, in another row the counting values of the facility can be displayed.

Display of counting for the facility

Here you configure what kind of counting should be displayed.

Text if facility is full

Any text (max. 255 characters)

Allocation to the row:

Here you allocate to the chosen row either the dynamic, the static text or the counting values.

Additional you can display instead of the counting values a text if the facility is full.



Opens this online help.



Back for saving.

The saving is done in the project designer.

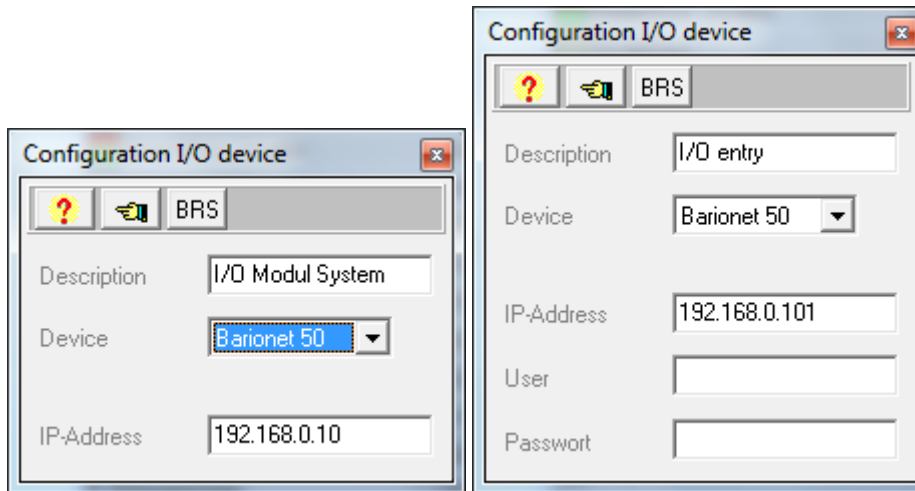


Starts the browser

If you use a network display the browser will be opened

I/O device

Double click to open the window for the IO device configuration.



Description

Name of the I/O device

Device

The from the CAR-READER supported I/O devices are listed.

Barionet
Barionet 50
CAM-In/Out
Grabber
Test

IP address

The network address of the device

The access to the Barionet 50 is protectable by a password:

User

The user, defined in the Barionet 50

Password

The password defined in the Barionet 50



Opens this online help.



Back for saving.

The saving is done in the project designer.

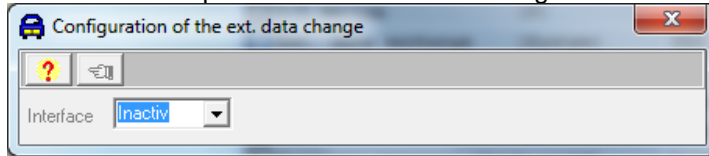


Starts the browser

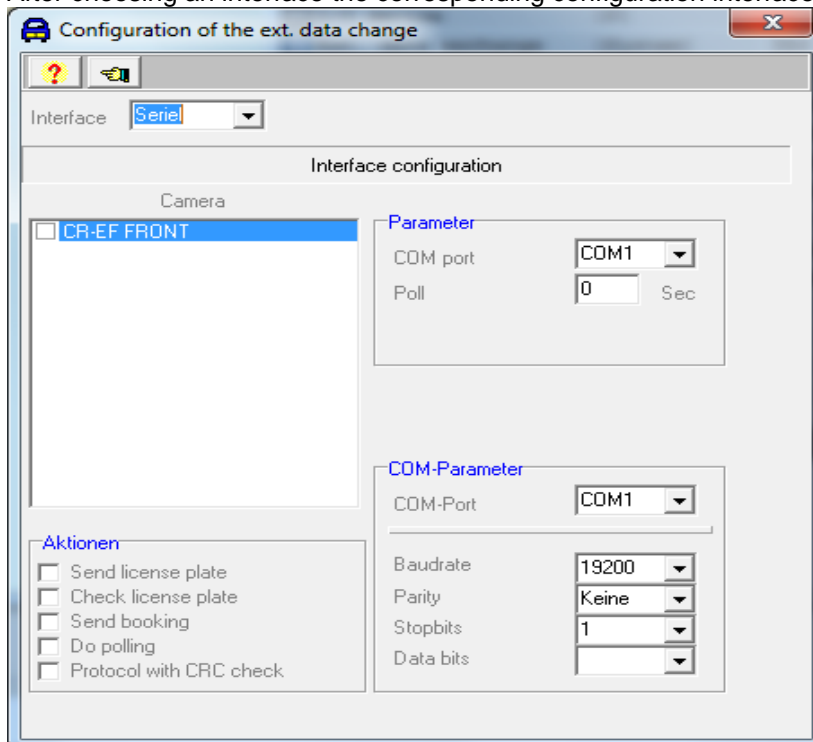
External data exchange

The communication with a third party system is realized via “external data exchange”. Five different methods are available: serial, TCP/IP, SQL, SAP, XML. The description of the protocol is found in the technical manual.

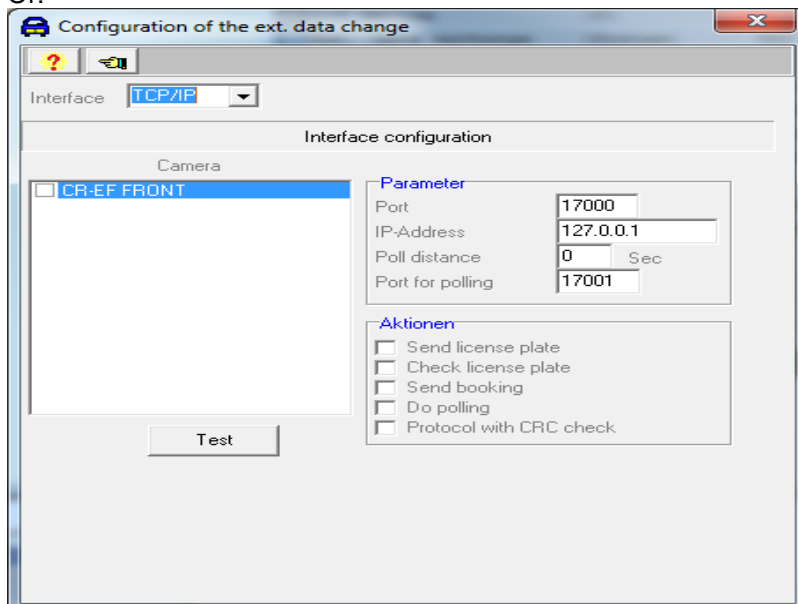
Double click to open the window for the configuration:



After choosing an interface the corresponding configuration interface opens:



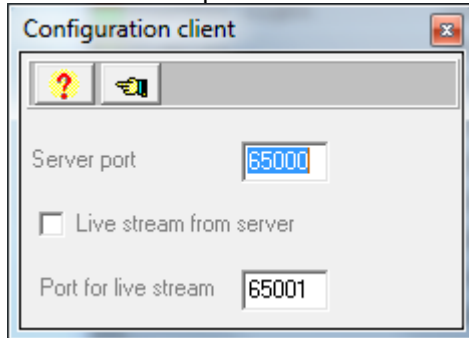
Or:



Client

The communication of the CAR-READER server with the connected clients is done by a server port. Ask your network administrator to get a free server port.

Double click to open the window for the client configuration.



Server port

This number has to be used in the starting interface of the CAR-READER client.

Live stream from server

Not activated: The client gets the images directly from the camera.

Activated: The CARREADER server sends the images to the client.

Hint: Some cameras are not able to serve for more than one user.

Port for live stream

This port is used by the server for sending the images to the client.



Opens this online help.



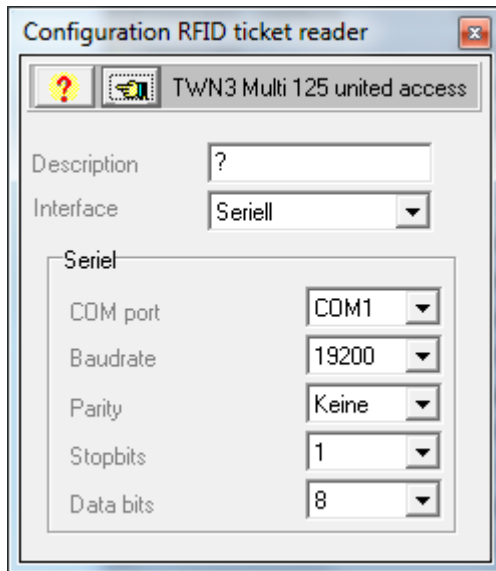
Back for saving.

The saving is done in the project designer.

Hint: Changing the server port requires a restart of the CAR-READER software.

RFID ticket reader

The availability of that component is depended on licensing.



Label

Name of the ticket reader.

Interface

Only serial connection is possible

Serial

The configuration data of the serial interface



Opens this online help.

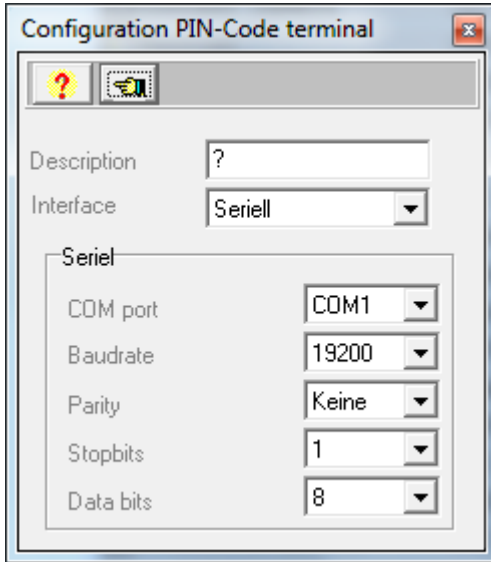


Back for saving.

The saving is done in the project designer.

PIN code terminal

The availability of that component is depended on licensing.



Configuration PIN-Code terminal

Description ?

Interface Seriell

Serial

COM port COM1

Baudrate 19200

Parity Keine

Stopbits 1

Data bits 8

Description

Name of the PIN code terminal.

Interface

Only serial connection is possible

Serial

The configuration data of the serial interface



Opens this online help.

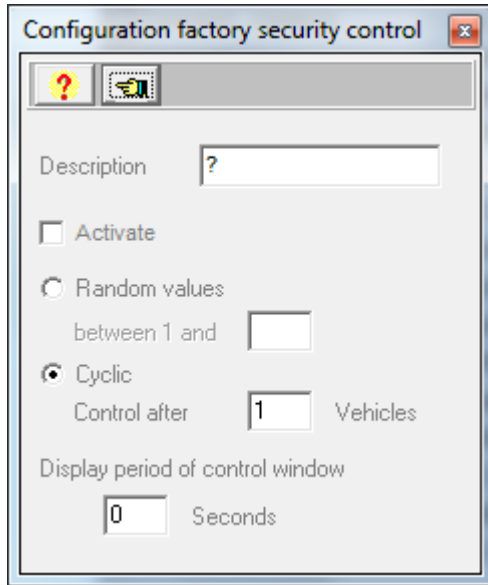


Back for saving.

The saving is done in the project designer.

Factory security control

Double clicking opens the window for the configuration.



Description

Name of the component.

Activate

This function has to be activated.

Random value

Here you enter a value after which a control has to be done at the latest.

Or:

Cyclic

Here you enter a value after which a control is to be done.

Display time of the control window in seconds

As long as that value, the control window stays open.



Opens this online help.



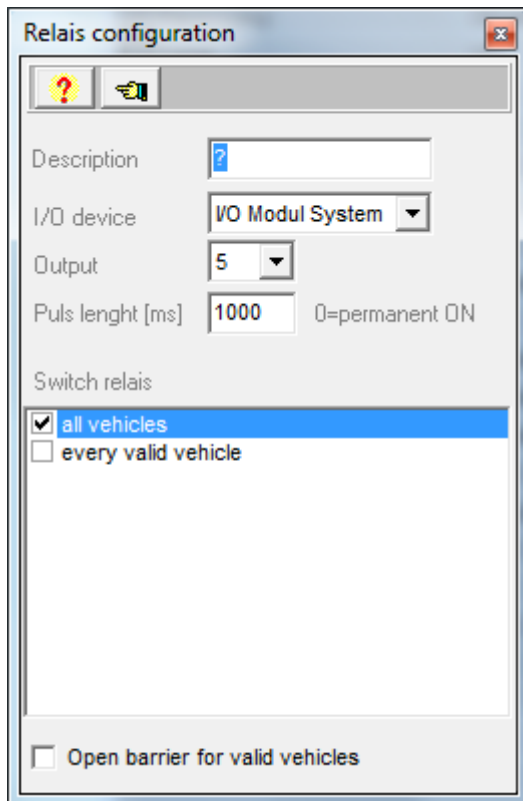
Back for saving.

The saving is done in the project designer.

Relay

With this component you can combine the barrier opening for authorized cars with additional identification numbers i.e. a ticket reader.

Double click to open the window for the configuration.



Description

Name of the relay component.

I/O device

Before configuring the relay you have to activate an I/O device.

Output

The output number of the I/O device, at which the relay is connected.

Impulse time [ms]

Time of the potential, which is set by the CAR-READER at the barrier.

Switch relay at

- each vehicle

or:

- each authorized vehicle

or:

- groups (multiple choice possible)

Here the already configured groups from the LP list are displayed.

As soon as a member of the marked groups is recognized the relay is switched.

Open barrier for authorized cars

Independent of the relay, the barrier is opened for authorized cars.



Opens this online help.

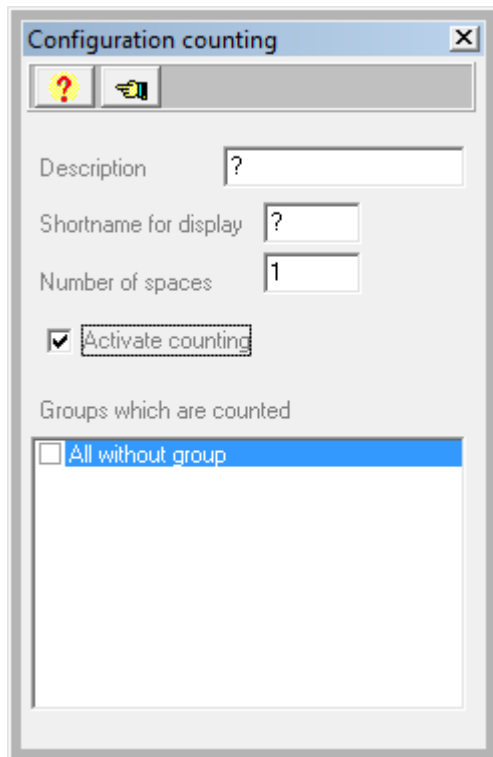


Back for saving.

The saving is done in the project designer.

Counting

Double clicking the added component opens the window for the configuration.



Description

This name is used within the project designer for identification.

Shortname for the display

Name of the display if it is connected.

Number of spaces

The total number of available spaces.

Activate counting

Has to be activated for counting.

Participating groups

Shown are the groups which are already created in the LP list.

Here you can choose those groups which should participate at the counting.

Also you can deactivate groups, which are allowed to drive in always, because of reserved parking spaces.

“All without groups”: all license plates should participate at the counting which do not belong to a group.

Hint:

In order that a station is counting, the configuration of the camera has to be set “Participate at counting”.



Opens this online help.

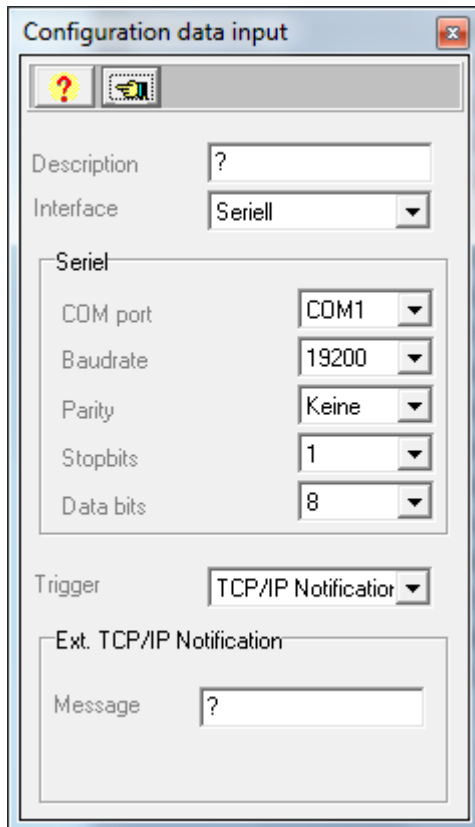


Back for saving.

The saving is done in the project designer.

Data input

Double clicking the added component opens the window for the configuration.



Configuration data input

Description ?

Interface Seriell

Serial

COM port COM1

Baudrate 19200

Parity Keine

Stopbits 1

Data bits 8

Trigger TCP/IP Notification

Ext. TCP/IP Notification

Message ?

For every recorded event you can get additional data via serial interface i.e. the weight of a truck.

Description

This name is used within the project designer to identify the component.

Interface

Connection is only serial possible.

Serial

The configuration data of the serial interface

Trigger

The triggering is done via TCP/IP notification

Message

The string of the TCP/IP notification message



Opens this online help.



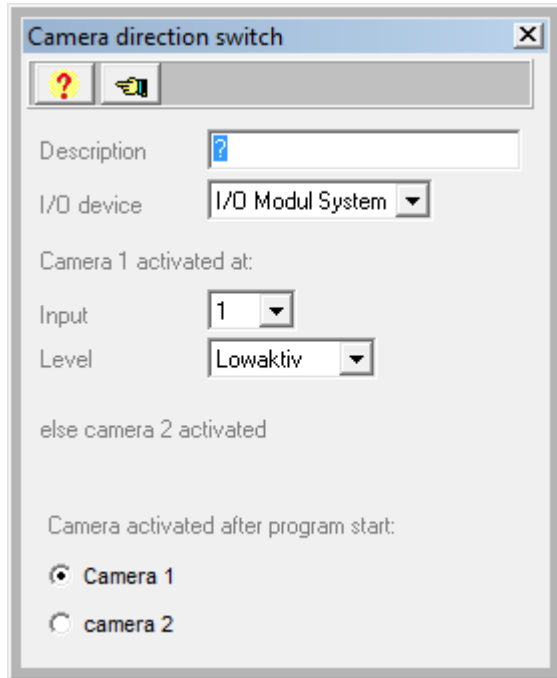
Back for saving.

The saving is done in the project designer

Direction switch

If you have a lane, which is used either as entry or as exit, you can switch two cameras for changing the driving direction.

Double click on the added component to open the window for the configuration.



Description

Name of the direction component.

I/O device:

All already configured I/O devices are listed here.

Input:

Input number at the I/O device

Level:

Potential state at the control device.

The level is chosen for camera 1.

I.e. Level = Low activity:

If the level is low active then camera 1 is reading,
if the level is high active then camera 2 is reading.

Camera active after program start:

If there is no well-defined signal, you choose here the camera which should read.



Opens this online help.



Back for saving.

The saving is done in the project designer

Signal horn

With this component you can assign for every single camera different sound to indicate the different recognition results.

After adding the component in the designer tree, the configuration window is opened by double click.

Description

Name of the signal horn.

I/O device

- PC-Sound
choose sound file
- Connected I/O device
(for external horns/ speaker)

Output

Number of the I/O device

Pulse lenght [ms]

Lenght in milli seconds

0 = permanent sound

Activate the desired events

Sound, if plate is

- in the blacklist,
- in the white liste,
- unknown..

End of the sound:

space or Esc key



Help
Opens the online help..



Back for saving.
The saving is done in the project designer.

Menu Administration

This menu handles the access to the administration of the system and the files.

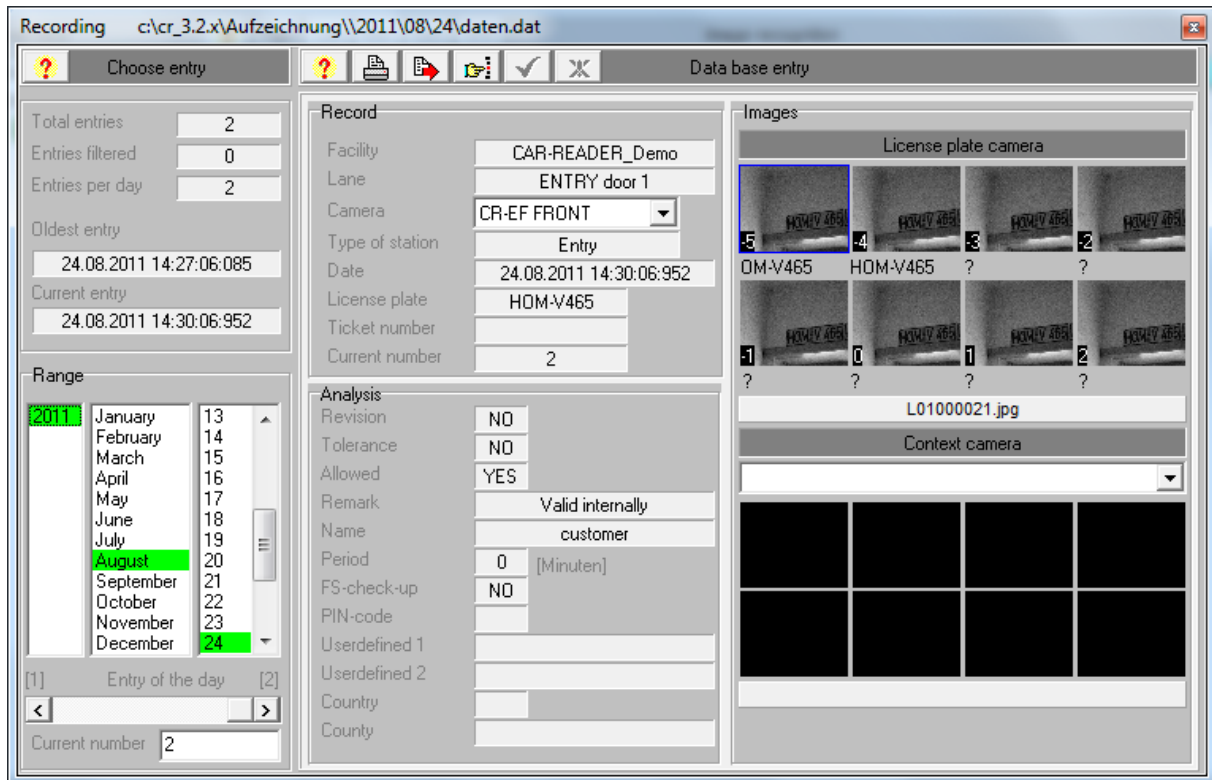
Submenu	Task
Recording	Showing the events
Access administration	Administration of the LP- and group list
Troubles/Actions	Monthly protocolling of the actions,configurations, troubles
Counting	Number of present vehicles
Statistics	Statistical evaluation of the recording database
User administration	Defining of users, pass words and program rights
System analyses	Tool to analyze the camera-, third party-, UDP-, TCP-data communication, protocolling of evaluation, image import for test reasons
Visitor administration	Administration of visitor parking spaces
Present vehicles	Showing the present cars

Submenu recording

With this submenu you get access to the data of the stored events.

Requirement:

- In the project designer, camera configuration, "Save events" you decide whether and in what scale a recognition process is stored.
- The location for the data is set in the window "Configuration system", "Recording directory".



The headline of the window shows the path to the file daten.dat, which collects data info.

In the left part you choose the desired files.

In the right part the data and the corresponding images to the chosen file are displayed.

After definition of a filter you can search for special events, pressing the symbol in the symbol bar. There you can also create a journal list.

Area “Choose entry”

When opening the recording window the latest file record is displayed and the corresponding day is marked green.

Basically the recorded files are summarized per day.

Total entries

Number of all recorded files

Entries filtered

Number of files, if a filter was activated

Entries per day

Number of files of the chosen day (green marked)

Oldest entry

Date of the oldest file in the recording folder

Current entry

Date of the youngest file in the recording folder

Meaning of the marks in the range window:



Chosen day



Entries available

No file available

Clicking at yellow marked month: the first entry is displayed

Clicking at yellow marked day: the youngest file of the day is displayed

Entry of the day

With the scroll bar you can choose within the green marked day.

Current number

The current number of right displayed file.

Entering a valid number and pressing RETURN displays a special file within the marked day.



Opens this online help.

Area “Data base entry“

Here the single data and corresponding images of the chosen file is displayed.
After defining a filter you can search for special events pressing the symbol in the symbol bar.
Also a journal list is creatable.

List field camera

If you have configured more than one license plate camera, you can change here to the data of the other cameras.

Images

Clicking on an image marks it.

Clicking on a marked image opens a new window in original size of the image.

The file name of the marked image is shown in the panel below of the images.

Clicking on the panel opens a window to copy that image into another subfolder.

Hint:

The number of the saved images is set for each camera in the project designer “Camera configuration“.

List field context camera

If you have configured more than one context camera, you can change here to the data of the other cameras.

Menu bar



Opens this online help.



Print the chosen file.



Opens the journal list.



Search event

Opens the filter window and changes the system into search mode.



Fast search for time period.



Accept filter

Uses the filter to scan the events and shows the results in the recording window.



Cancel of the search mode.




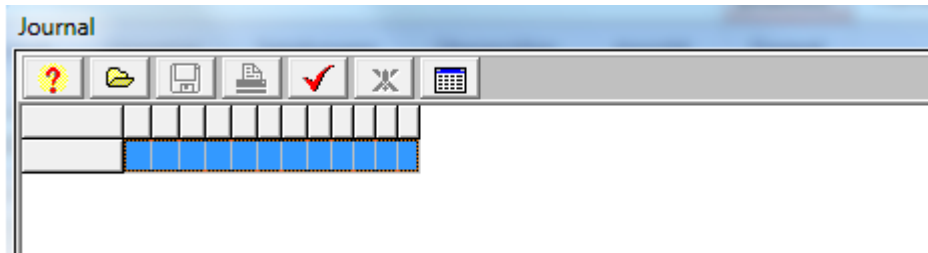
Refresh

The last happened event is displayed.

Journal

For a better overview you can display the events in list form.

After pressing the journal button  in the recording menu an empty journal interface and the data filter opens to create a journal:



Data filter for Journal creation

Facility: All

Lane: All

Camera: All

Type of station: All

☐ License plate

☐ Ticket

☐ Name

☐ Remark: Valid internally

☐ Userdefined 1

☐ Userdefined 2

☐ Period >= 0 [Minutes]

☐ Period <= 0 [Minutes]

☐ Tolerance

☐ FS-check-up

☐ Revision

☒ Period

From: 24.08.2011 14:51:30

Until: 24.08.2011 14:51:30

☐ Day time

From: 14:51:30








Until: 14:51:30

Weekdays:

- ☒ Monday
- ☒ Tuesday
- ☒ Wednesday
- ☒ Thursday
- ☒ Friday
- ☒ Saturday
- ☒ Sunday

See description data filter.

After clicking on the button "Create journal list" the events are listed:

Journal				
      				
000002	Date	License plate	Type of station	Remark
000001	24.08.2011 14:27:06:085	HOM-V465	Entry	Unknown
000002	24.08.2011 14:30:06:952	HOM-V465	Entry	Valid internally

The current data and interface filter is valid and used.

Menu bar of the journal:



Opens this online help.



Load journal list



Saves the journal list as a csv-file.



Prints the journal list.



Create journal list

Uses the data and mask filter and displays the events in the journal list.



Cancel the searching mode

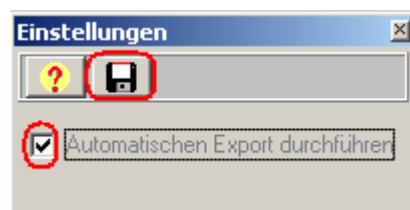


interface filter

To activate the desired columns in the journal



Automatic export



In the morning at one o'clock the events filtered by the settings are stored in a CSV-file.

Location: installation directory \Projekt\JOURNAL.

Filename: journal08062012.csv for the journal from June, the 8th of 2012.

Data filter

The data filter is used for the event search, the journal and the statistics.

With this filter you can search in all events with many criteria and display the result in the recording interface or in the journal.

All criterion are logically related by AND.

Hint: If you have already huge datas collected, then you should restrict the filter to a camera or restrict the time period.

Facility/ Lane / Camera

These fields depend on each other. If you choose a special camera the corresponding facility and lane is set automatically.



Set the Facility/ Lane/ Camera fields back to all cameras.

Station type

In the project designer the direction (entry or exit) is set at camera configuration.
Here you can restrict the search to entry or exit camera.

All the following criteria has to be activated with the corresponding checkbox!

License plate

Search for complete plates. The dash has to be set corresponding to the OCR configuration.

Ticket/ Name/ Info/ Userdefined 1/ Userdefined 2/

Correspond to fields in the LP list. You will find events to the chosen data.

Hint for usage of the wildcard * in the fields License plate, Ticket/ Name/ Userdefined 1/ Userdefined 2:

If you know only a part of the field you can use the wildcard *.

I.e: Searching in the plate field for *ke oder ke* oder k*e provides KEH-AB1 or R-KE234.

A * in the searching field is interpreted as searching for a part of the string.

Case sensitivity is ignored.

Time period

The time period from the movement list of the LP list is evaluated.

Tolerance

Not yet realized until today

Facility security control

Not yet realized until today

Correction

All entries with plate correction are listed.

Time

For midnight (24:00) you have to enter 00:00:00

Day time

Until: max. 23:59:59

Days of the week

The single days of the week can be activated or not. At least one day remains active.

Menu bar of the data filter:



Opens this online help.




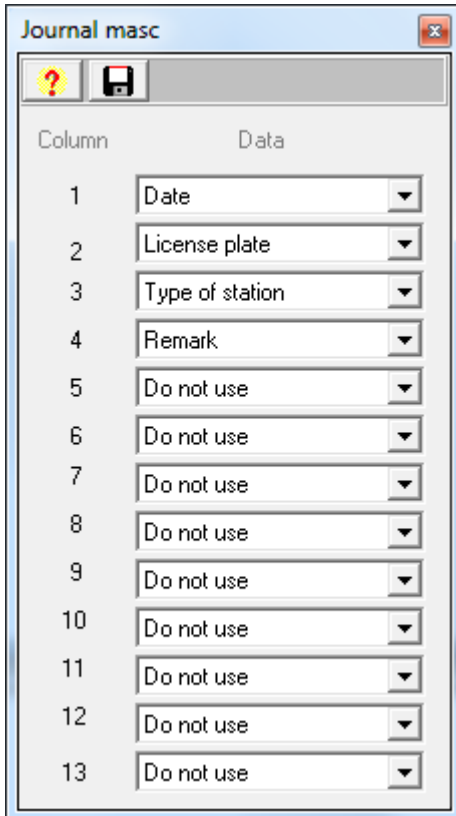
Save



Reset filter

Interface filter

Clicking the  button in the journal list opens the interface filter:



Column	Data
1	Date
2	License plate
3	Type of station
4	Remark
5	Do not use
6	Do not use
7	Do not use
8	Do not use
9	Do not use
10	Do not use
11	Do not use
12	Do not use
13	Do not use

Here you can activate the desired columns in the journal.




Opens this online help.

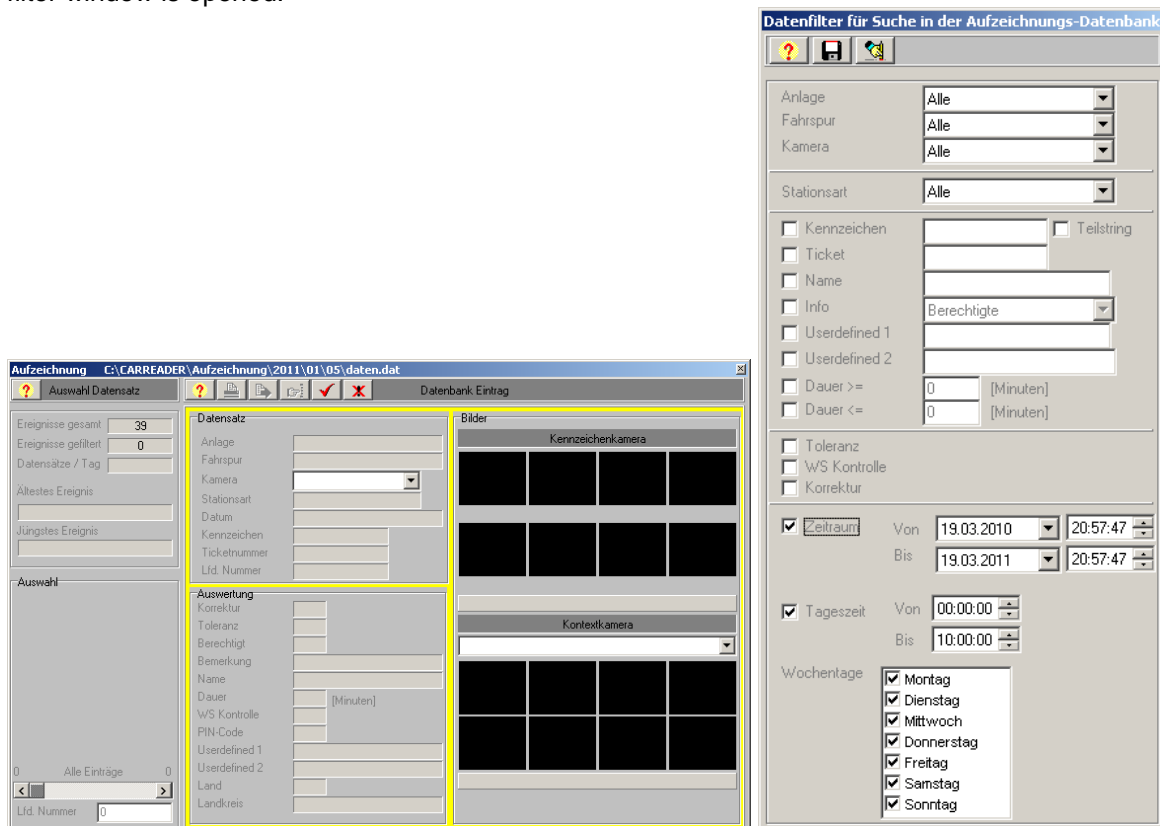


Save

After saving, the changed interface is valid.

Search event

Clicking on the  button within the recording menu, changes into the search mode and the data filter window is opened:

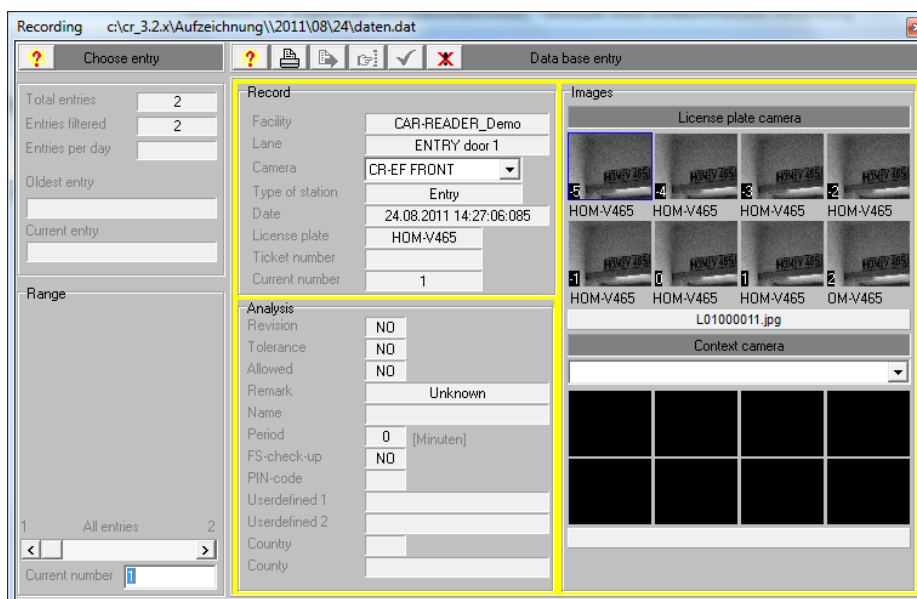


The screenshot displays two windows. The main window, titled 'Aufzeichnung', shows a list of events with columns for 'Ereignisse gesamt' (39), 'Ereignisse gefiltert' (0), 'Datensätze / Tag', 'Ältestes Ereignis', and 'Jüngstes Ereignis'. Below this is a 'Datenbank Eintrag' section with fields for 'Anlage', 'Fahrspur', 'Kamera', 'Stationsart', 'Datum', 'Kennzeichen', 'Ticketnummer', and 'Lfd. Nummer'. To the right, a 'Datenfilter für Suche in der Aufzeichnungs-Datenbank' window is open, showing various filter options: 'Anlage' (Alle), 'Fahrspur' (Alle), 'Kamera' (Alle), 'Stationsart' (Alle), 'Kennzeichen' (with a 'Teilstring' checkbox), 'Ticket', 'Name', 'Info' (Berechtigte), 'Userdefined 1', 'Userdefined 2', 'Dauer >=' (0 Minuten), 'Dauer <=' (0 Minuten), 'Toleranz', 'WS Kontrolle', 'Korrektur', 'Zeitraum' (Von 19.03.2010 20:57:47 to 19.03.2011 20:57:47), 'Tageszeit' (Von 00:00:00 to 10:00:00), and 'Wochentage' (Montag, Dienstag, Mittwoch, Donnerstag, Freitag, Samstag, Sonntag).



Apply filter

Applies the data filter and shows the events in the recording window.




The screenshot shows the 'Recording' window with the title bar 'c:\cr_3.2.x\Aufzeichnung\2011\08\24\daten.dat'. The 'Choose entry' section on the left shows 'Total entries: 2', 'Entries filtered: 2', and 'Entries per day'. The 'Data base entry' section on the right shows 'Record' details: Facility (CAR-READER_Demo), Lane (ENTRY door 1), Camera (CR-EF FRONT), Type of station (Entry), Date (24.08.2011 14:27:06:085), License plate (HOM-V465), Ticket number, and Current number (1). Below this is the 'Analysis' section with fields for Revision, Tolerance, Allowed, Remark (Unknown), Name, Period (0 Minuten), FS-check-up, PIN-code, Userdefined 1, Userdefined 2, Country, and County. The 'Images' section on the right shows a grid of license plate camera images (HOM-V465) and a context camera image (L01000011.jpg).



Cancel the searching mode

Quick search



After clicking on the button  the quick search mode is activated.
The searching is then restricted to plate and time period.

Type in the desired license plate or use the * for all plates.

Hint: * can also be used as wildcard: RE* or *RE or R*E looks for all plates with a substring RE in it.
The position of * is arbitrary. You can use only one single *.



Starts searching

Starts the searching according to the filter and displays the results.



Cancel the searching mode

Submenu access administration

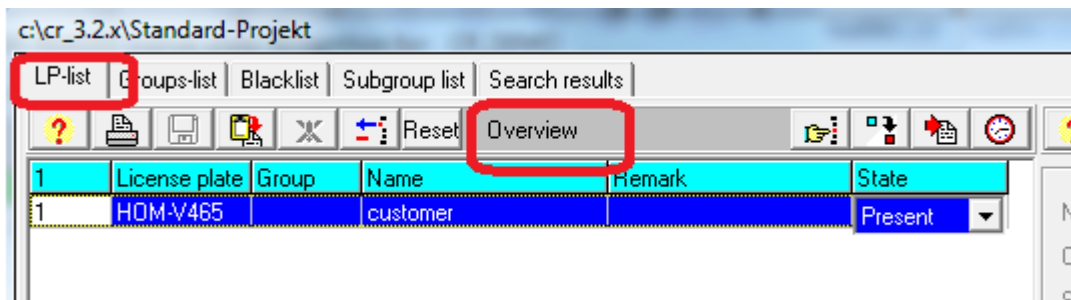
The access control is managed with this submenu:
 Create, import and export lists for the entry and exit authorities.
 Create and assign time profiles.
 Create groups and subgroup lists.
 Show the movements of single license plates.

Hint:

To enable the checking of the license plate list it has to be configured in the camera configuration of the project designer by activating "check LP list".

Tab sheet "LP list"

Area "Overview"



Colour markings:

- Current file
- No restrictions, full access
- Result of searching

Colour markings depending on restrictions:

- Locked, no rights
- Restrictions, no rights at the moment, check authority profile
- Restrictions but allowed at the moment

Hint for operating:

A simple mouse click at a row marks this file blue and the corresponding data are shown on the right side.

Clicking again at a blue marked row and when the file is a member of a group, the file is then shown in the group list. Here you will get a description about the topic "group".

Clicking with the right mouse key opens a pop-up menu:

Copy: Copies the marked file into the cache

Insert: Inserts the cache as new entry into the list

Black-List: Insert single: The entry is copied to the blacklist.

Black-List: Insert group: The corresponding group is copied into the blacklist.

Black-List: Remove single: The entry is deleted from the blacklist.

Black-List: Remove group: The corresponding group is deleted from the blacklist..

Hint for the column "state":

The column state shows the presence of a license plate.

Required is a correct configuration of the cameras in the project designer. The field "direction" is set to "entry" or "exit".

Starting the system, the state is set to undefined.

With the button "reset", the state of all license plates can be set to undefined.



Print

The LP list is printed on a standard Windows printer.

Current number / license plate / group / name / remark / state



Save

After any changes in the LP list the symbol becomes active.



New entry

After activating the button "New entry" the record field on the right side is released for entering data.

Obligatory fields are name and license plate. The plates have to be unambiguous.



Deletes single entries



Reset

Sets all plates to the state undefined.



Search

Here you can search for names or plates.

The number of searching results is displayed in a window.

The hits are marked black in the license plate list. All hits are listed in the list "search results".



Import CAR-READER version 2.10.x

Allows to import plate data from the CAR-READER version 2.10.x



Excel Im- Export

Here you can import an Excel list with plate information into the CAR-READER or you can export the LP list into a Excel file.

Requirements:

- Excel has to be installed on the CAR-READER PC.
- In the options of Excel (Tab-sheet "general") the Z1S1-relation of the cells has to be activated.

Import of a Excel list:

- The data have to be in the columns A – O
- The import stops with the first empty row.

The data fields of the CAR-READER have to be assigned to the corresponding column names.

Example:

There is a LP list with the two columns name (at column A) and license plate (at the column B).

CAR-READER-field	Excel column
Name	A
Company	
Street	
ZIP	
city	
Remark	
License plate	B
...	
Not used fields remain empty.	

Delete

Deletes the Excel column name.

Save

The schedule CAR-READER fields → Excel columns is stored.

Import

Starts the import. A window for entering the row numbers opens.

"From row": 2 or higher, because the first row is ignored concerning column head lines.

Export the CAR-READER LP list to Excel:

The columns are designed from A till Q by standard.

If you want to export only single fields then the table on the right side has to be configured.

Delete

Deletes the Excel column designation.

Save

Saves the Excel column designations.

Export

Starts the export of the column in the Excel column labels assigned.
i.e.. see above.



Time profile

They are predefined user pattern.

Example:

All employees are allowed to enter at working days from 9 a.m. till 5 p.m.

You create unique a corresponding user profile and assigns this profile to the license plates of the employees.

You can assign for every lane (camera) a separate profile.

In this way you can design that entry is only allowed at working days between 9 a.m. until 5 p.m. but exit is possible at any time.

The screenshot shows a window titled "Time profile". On the left, under "Profile choice", there is a list of 10 standards, with "Standard 1" selected. Below this is a "Profile name" field containing "Standard 1". On the right, under "Valid at the following days [von 00:00 bis 00:00 immer gültig]", there is a table with columns: Day, From, Until, and, From, Until. The table shows settings for each day of the week, with checkboxes for activation.

	From	Until	and	From	Until
<input checked="" type="checkbox"/> Monday	00:00	00:00		00:00	00:00
<input checked="" type="checkbox"/> Tuesday	00:00	00:00		00:00	00:00
<input checked="" type="checkbox"/> Wednesday	19:00	23:59		00:00	00:00
<input type="checkbox"/> Thursday	00:00	04:00		00:00	00:00
<input type="checkbox"/> Friday	00:00	00:00		00:00	00:00
<input type="checkbox"/> Saturday	00:00	00:00		00:00	00:00
<input type="checkbox"/> Sunday	00:00	00:00		00:00	00:00

There are 10 different profile pattern possible. the choice is done in the left part of the screen. The field profile name allows to change the designation (up to 13 characters).

In the right part of the screen the single days of the week can be activated. For every day of the week there are two different time periods possible.

Retaining the zeros mean that the complete day (24 hours) is valid.

Changing only one part means that only this one is valid.

Validity over midnight is done in this way:

Monday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Tuesday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Wednesday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Thursday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Friday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Saturday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

Sunday: 0 o'clock till 4:20 o'clock and 22 o'clock till 0 o'clock

With these settings the access is only possible between 10 p.m and 4:20 a.m.

Hint:

It is impossible to enter 24:00

If there is a 00:00 in a "until column" this is interpreted as 24:00 (midnight)

Entering 17:00 till 00:00 means 17:00 till 24:00

Entries like 07:00 till 05:00 or from 20:00 till 02:00 are ignored.

Area "Record"

The screenshot shows a web-based form titled "Record". At the top, there is a toolbar with icons for help, print, and save. The form fields are as follows:

Name	customer
Company	
Street	
ZIPcode/city	
Remark	
License plate	HOM-V465
Created	24.08.2011 14:29:44
Country	
Vehicle type	
Group	
PIN-code	
Ticket number	
Userdefined 1	
Userdefined 2	
Userdefined 3	

Below the form fields, there is a "Read" button. To the right of the form, there are four yellow question mark icons. At the bottom left, there is a checkbox for "Limitations" and a "Profile" button. At the bottom right, there is a large empty box labeled "Passport photo".

Here are the data displayed which correspond to a chosen plate.

 Mandatory fields

Entering the license plate:

Left field (magenta marked): mandatory !

It saves the complete license plate. For German cars we recommend to enter with dash.

Example: R-EY515

Spaces are removed automatically.

Hint:

The dash can be deactivated in the project designer / camera configuration / button OCR.

Then also in the license plate list the plate string should not have a dash, otherwise it will not be recognized (matched correctly).

Please also check that plates are single in the list. Do not store the same plate two times.

Right field:

Use of the wild-card “?”

Here you can replace single positions in the string with a character “?”. This position is then ignored during evaluation.

Example: R-EY51?

R-EY515 , R-EY51S are both matched to this entry.

Several „?” are possible:

R-00000/ R-????? collects all cars from Regensburg ® with exactly 5 characters after the dash.

You will find them in the main entry R-00000.

Hint:

The length of the plate has to be identical. R-EY51 will not be recognized in the above example.

Field “Group“:

A group consists of several members of the LP list for which a well-defined number of spaces are reserved.

Example:

The group supplier has 10 members and reserved are 5 parking spaces.

If the sixth car of the group tries to drive in, then the barriers remains closed.

Type in a new group name or choose a already existing name in the left text field.

A new group is exclusively created here.

Field “Subgroup“:

After assigning to a group a new text field “subgroup“ is released. So the group can be separated again.

Hint:

- So that the plate is used for the calculation of the free spaces you have to activate the restrictions and in the profile you have to set group control.
- Enter in the tab-sheet “group list “ the number of spaces and save these settings.

Tab-sheet “Subgroup list“: Enter the number of spaces in the field “spaces“ and save the settings

Field “PIN code“:

For security applications there is a possibility to combine a PIN code with a valid license plate to open the barrier.

Field “Ticket number“:

For security applications there is a possibility to combine a (transponder) ticket number with a valid license plate to open the barrier.

Fields “Userdefined 1 ... 3 “:

These three fields are reserved for special user defined adaptations.

The notation „userdefined“ can be changed in the language files CR_ xxxx.TXT lines 244-246.

Important: Do not change the number of lines in these files! Only overwrite the corresponding texts.

Restrictions

Only after activating the check-box “restrictions“ the defined user profiles will be working.

Then the button “profile“ is released.

Here you can see at a glance if there are any restrictions set.

Passport photo

To every entry of the LP list a separate photo (i.e. of the driver or the complete car) can be saved. If you have activated in the project designer in the lane configuration „Passphoto in the overview“ then in the opened overview window to that lane this photo will be displayed as soon as the plate is recognized.

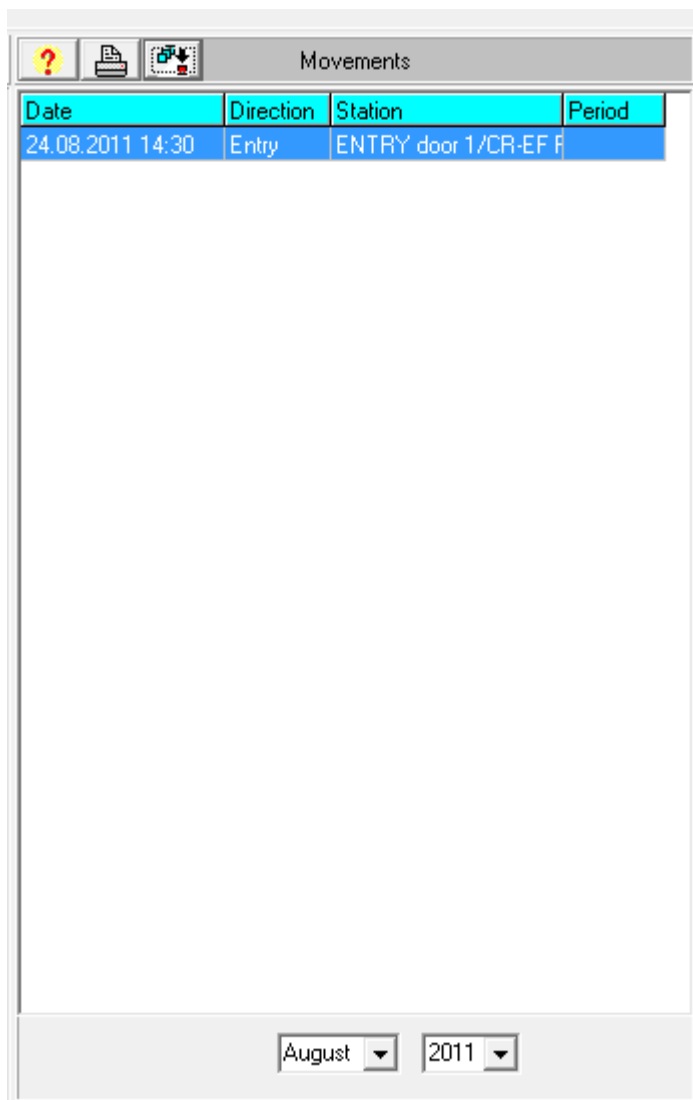
Load

The format has to be: *.JPG

Create pass photo

The camera has to be connected via DirectX

Area “Movements”



The screenshot shows a software window titled "Movements". It contains a table with four columns: "Date", "Direction", "Station", and "Period". The first row of data shows "24.08.2011 14:30", "Entry", "ENTRY door 1/CR-EF F", and an empty "Period" cell. Below the table is a large empty rectangular area. At the bottom of the window, there are two dropdown menus for selecting the month and year, currently set to "August" and "2011".

Date	Direction	Station	Period
24.08.2011 14:30	Entry	ENTRY door 1/CR-EF F	

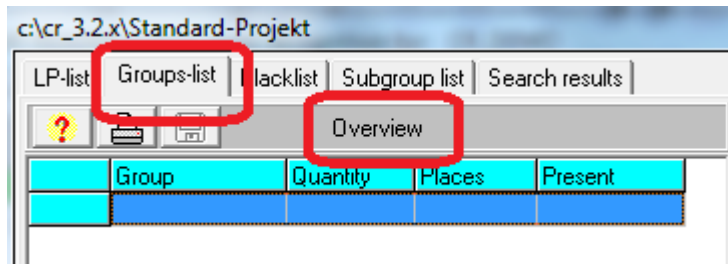
Here you see the entries and exits of the chosen license plate. the latest event is on the top. The recording is stored monthly. Choose the desired month and year by the corresponding boxes.

Print

All data to the chosen plate are printed.

Tab sheet “Group list”

Area “Overview”



A group consists of several members of the LP list for which a well-defined number of spaces are reserved.

Example:

The group supplier has 10 members and reserved are 5 parking spaces.

If the sixth car of the group tries to drive in, then the barriers remains closed.

The systems calculates from the license plate list automatically the group list when opening the tab sheet.

Configuration and activation of a group control:

Tab sheet “LP list”

- Create a new file or mark an already existing.
- Right area “file”
 - Field “Group”: enter name
 - Activate field “restrictions” and open “Profile” :
 - Activate “Group control” .
 - “Back for saving” and save.

Hint:

For already existing file check that the state is undefined.

Tab sheet “Group list”

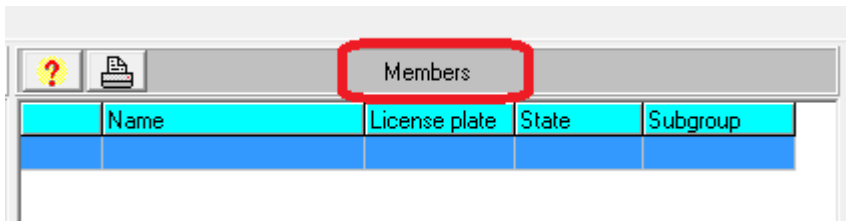
- Enter the number of spaces and save the settings.
- The members are listed in the right area.

Hint:

Gruppe	Anzahl	Plätze	Anwesend
1 Netto	1	1	0
2 privat	1	1	0
3 Standard	4	2	3

If the number of present cars exceeds the number of spaces then not all members of the group have activated the group control.






Area „Members“



Shows the members of the chosen group.

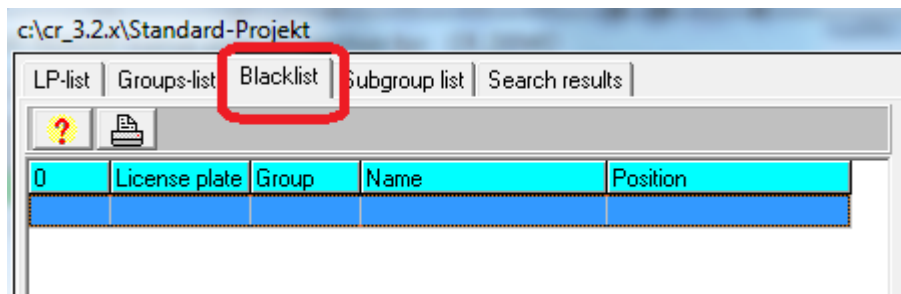
Color markings:

They correspond to the markings in the LP list.

-  Current file
-  "Group control" is not activated in the user profile.
(This plate is not used when calculating the free spaces)
-  Locked, no restriction
-  Restriction, in the moment no authority; check user profile
-  Restriction, in the moment allowed

Double click on a list entry: display of the file in the LP list.

Tab sheet “Black list“



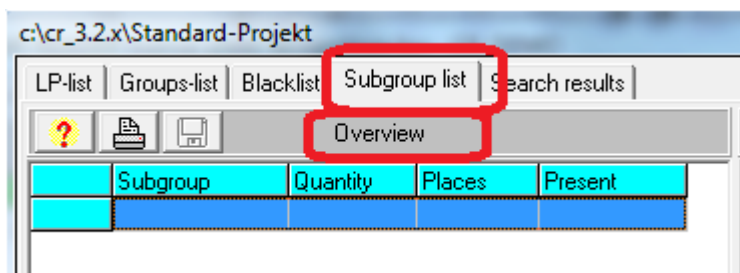
In the black list all plates from the LP list are listed which have no authority to drive in or out. The system creates the black list automatically from the LP list when opening the window. The column “position” shows the current number in the LP list. Double clicking on an entry shows the file in the LP list.

Lock entries and exits:

Mark or create the entry in the LP list.
Activate “restrictions” in the file.
Click on the button “profile”: the window with the user profiles opens.
Activate “Authority locked”.
Click on back for saving and save.

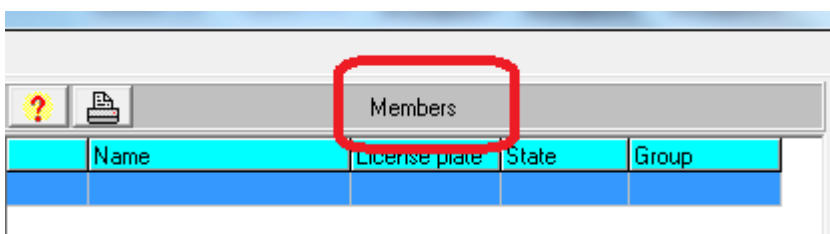
Tab sheet “Subgroup list”

Area “Overview”



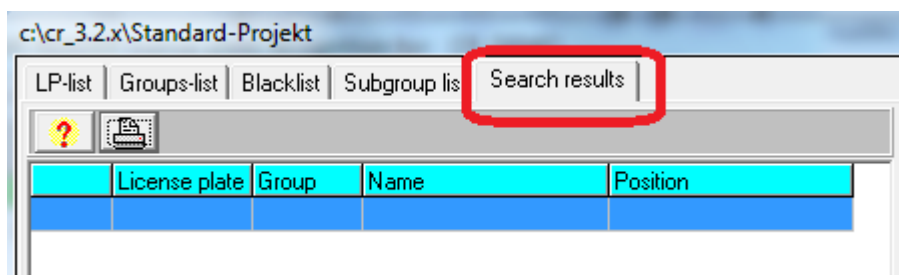
The overview shows the subgroups.
Enter the number of spaces and save the settings.

Area “Members”



Here the members of the marked subgroup are displayed.

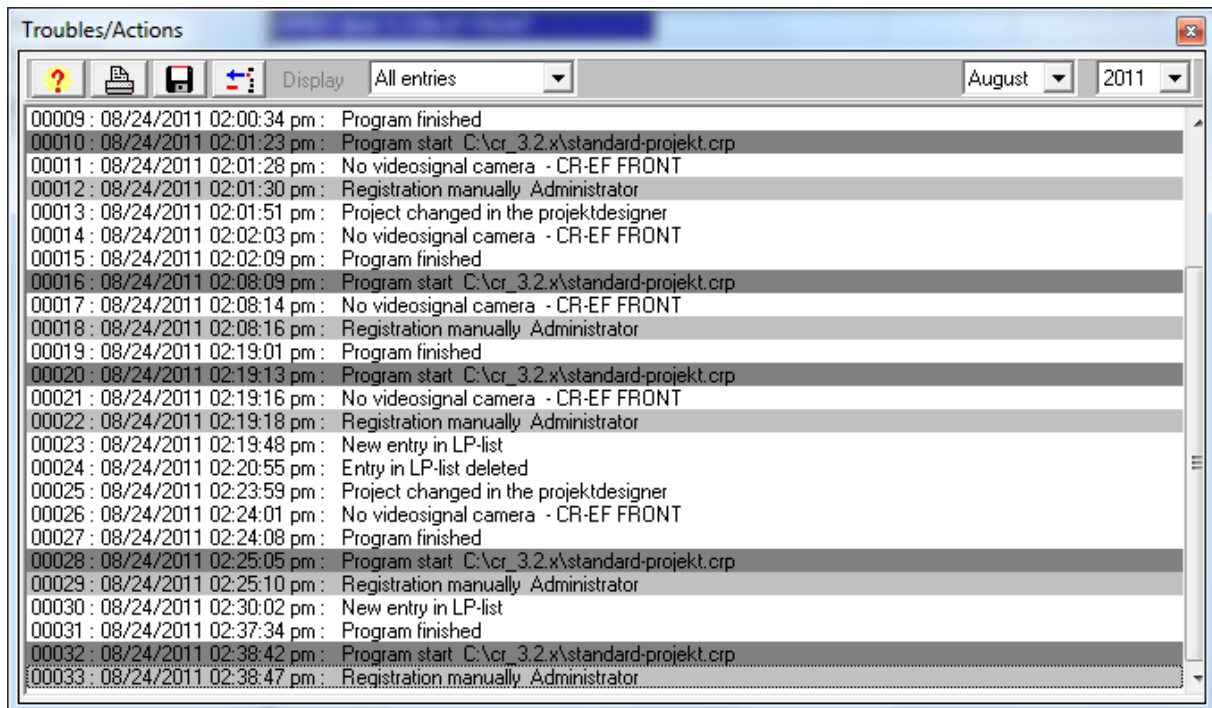
Tab sheet “Search results”



Here the results of the search in the LP list are displayed.

The column “position” shows the current number in the LP list.
Double clicking on a list entry shows the file in the LP list.

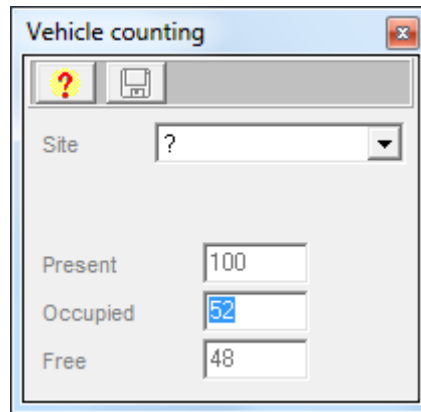
Submenu troubles / actions



The trouble shooting and actions are stored monthly.

Submenu counting

In the project designer with the component “counting” you can close a facility when a predefined number of cars have entered.



Field	Value
Present	100
Occupied	52
Free	48

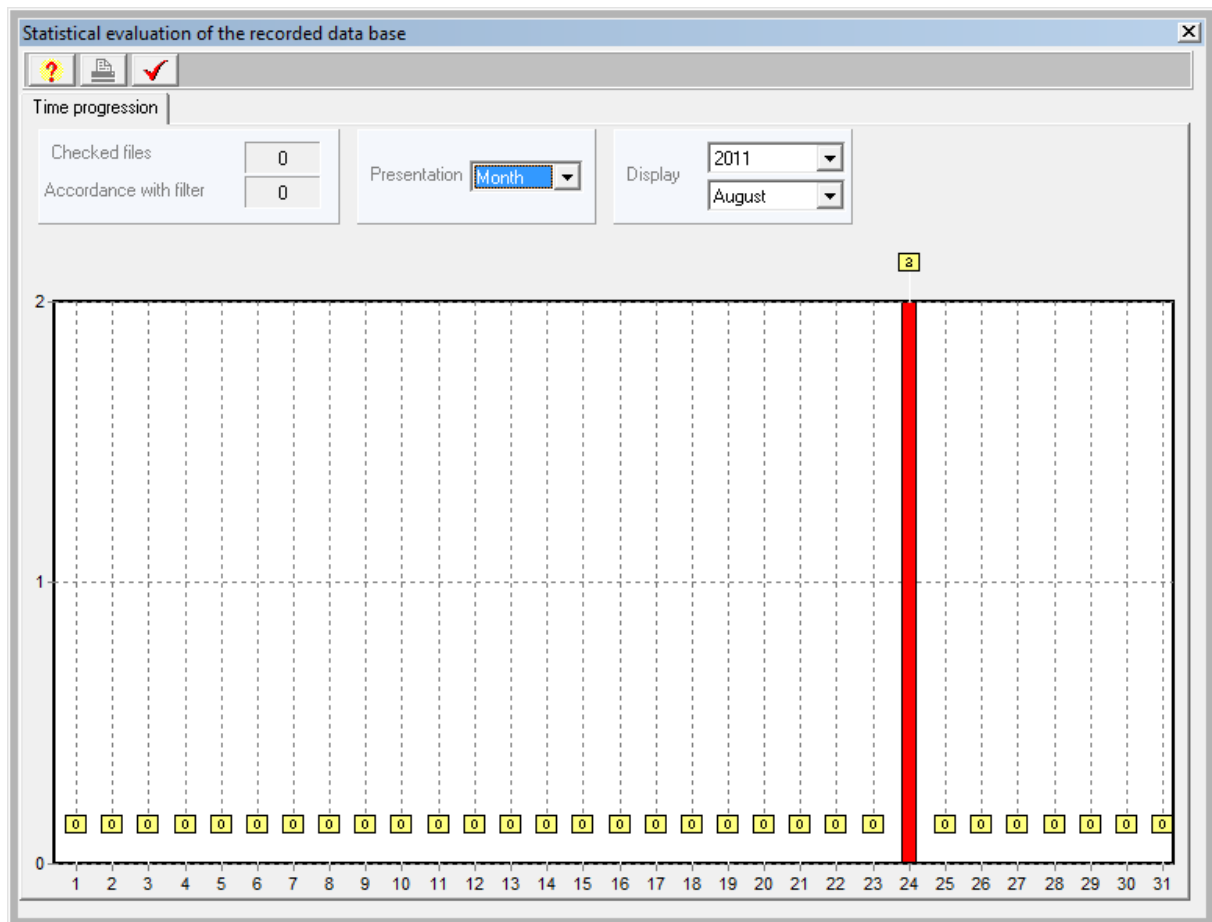
Here you can display and change the allocation:

- choose facility
- Present is preconfigured by the project designer
- enter the number for occupied
- Save

The field “free” is calculated and is refreshed when the window is open.
The value can be shown on a connected display.

Submenu statistic

Here the distortion of the content of the recorded events can be shown graphically.



The choose of the criteria is done by the [data filter](#).

Used data: All stored data from the recorded events.

Accordance filter: The number of filtered data.

Presentation:

Year (in month)

Month (in days)

Day (in hours)

Display

of the chosen year and month



Opens this online help.



Print the statistics



Creates a statistic
Applies the data filter and shows the results as bar graph.

Submenu *user administration*

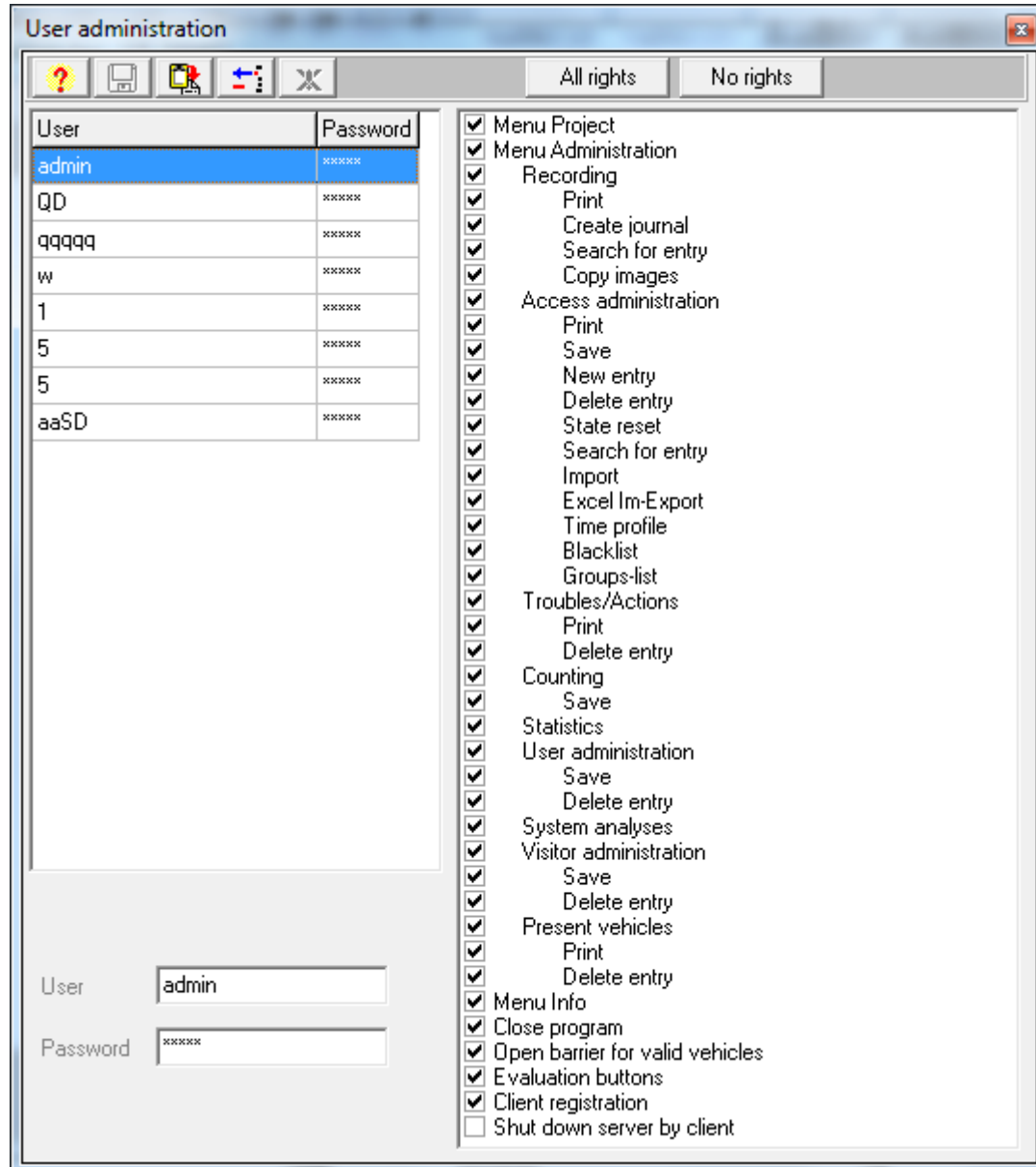
After starting the program CARREADER.EXE the main interface is opened and a registration window opens.

Already in this state the complete configuration is loaded and working.

After entering a valid username with password the software is usable corresponding to the defined authority.

All the users with their rights are administrated in this menu.

The predefined standard user when installing a totally new system is **admin** with password **admin**.



The number of users is unlimited.

The number of characters for each user name is limited to 20 symbols.

The number of characters for the password is limited to 10 symbols.

By activating or deactivating the separate menus, submenus or functions the marked user is able to execute appropriate actions selected or not.



Online help



Save



New entry



Delete entry

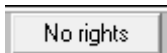


Abort new entry

In the right window area the user rights for the chosen user can be changed:



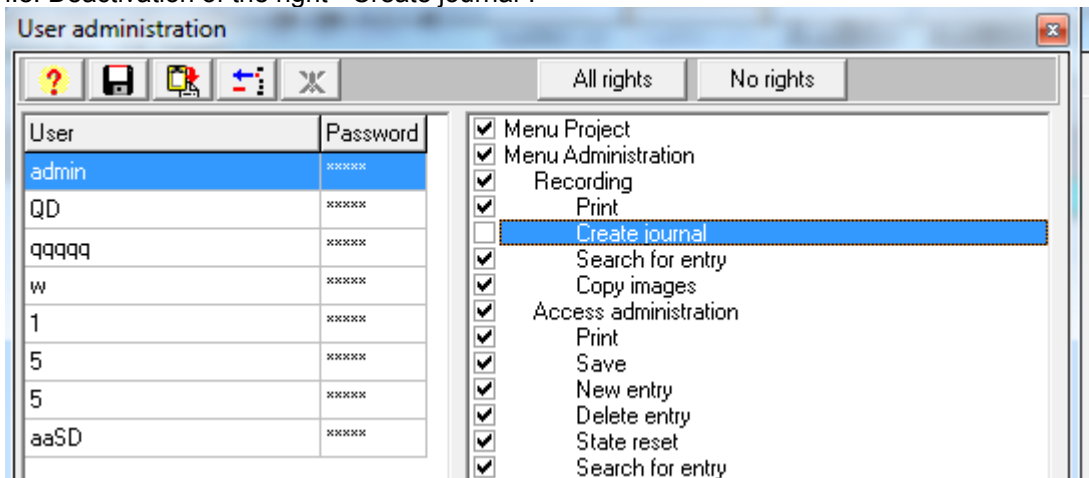
Set all rights



Deletes all rights

To deactivate a special right in the menu administration the menu administration and the corresponding submenu has to be activated.

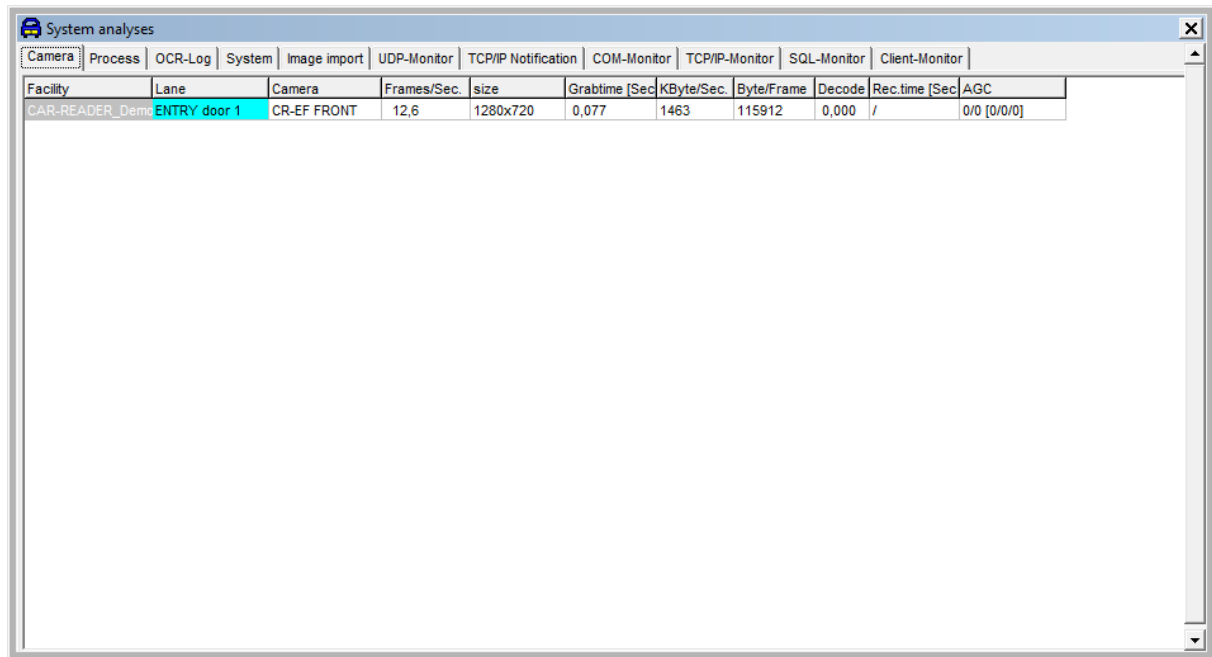
i.e: Deactivation of the right "Create journal":



The rights in the third level (Print / Create journal / Copy images) of the submenu recording are changeable if the menu administration and recording is activated.

Submenu system analysis

This menu displays system data and serves the administrator to optimize the system.



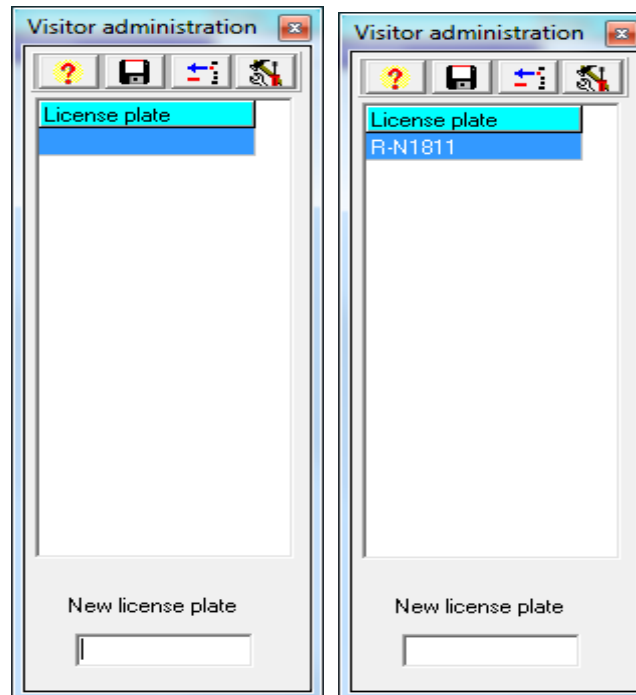
Tabsheet	Content
Camera	Lists all configured cameras to control the frame rate and image sizes
Process	Graphically display of the frame rate of the cameras
OCR log	Listing of the process of the OCR evaluation for single cameras.
System	Hard- ad software data of the PC and parameter for the CAR-READER-configuration
Image import	Here you can load JPG images and AVI films for test reasons
UDP monitor	Protocolling of the UDP commands
TCP /IP Notification	Protocolling of the TCP /IP notification
COM monitor	Protocolling of the COM interface
TCP /IP monitor	Protocolling of the TCP /IP data exchange
SQL-Monitor	Protocolling of the SQL data exchange
Client-Monitor	Protocolling of the data exchange with the client

Submenu visitor administration

Here you can administrate visitor parking spaces: The exit gate opens only when the visitor registers at the reception area and when his license plate is entered in this list. Usually the attendant opens the entry gate manually. But when the car is exiting the gate opens automatically and the entry is deleted out of this list.

At midnight the complete list is deleted automatically.

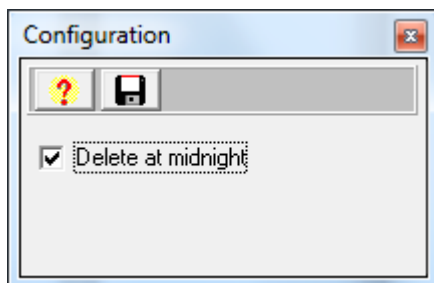
Requirement: In the configuration of the exit camera you have to activate "Visitors allowed".



Enter the plate in the field "New license plate". By pressing the save button the plate is taken over into the list.



Delete list at mid night.



After activating the complete list is deleted at mid night.

Submenu present cars

All cars present in the facility are listed here.

List of present vehicles				
	License plate	Facility	Date	Name
15619				
1	GD-HASI1	EINFAHRTEN	14.05.2012 12:32:53	Test
2	GD-HASI1	EINFAHRTEN	14.05.2012 12:34:58	Test
3	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:03	Test
4	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:08	Test
5	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:13	Test
6	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:29	Test
7	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:34	Test
8	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:48	Test
9	GD-HASI1	EINFAHRTEN	14.05.2012 12:35:53	Test
10	GD-HASI1	EINFAHRTEN	25.05.2012 10:06:07	
11	GD-HASI1	EINFAHRTEN	25.05.2012 10:06:18	

Yellow marking: the plate is unknown.

Green marking: the plate is in the white list.

Requirement:

- This configuration makes only sense for facilities with entries and exits.

- In the project designer each camera have to activate „present cars“.
There you can also configure to count only whitelisted cars or all plates.



Help

Opens the online help.



Print

Prints the list.



Delete entry



Delete list.



Settings

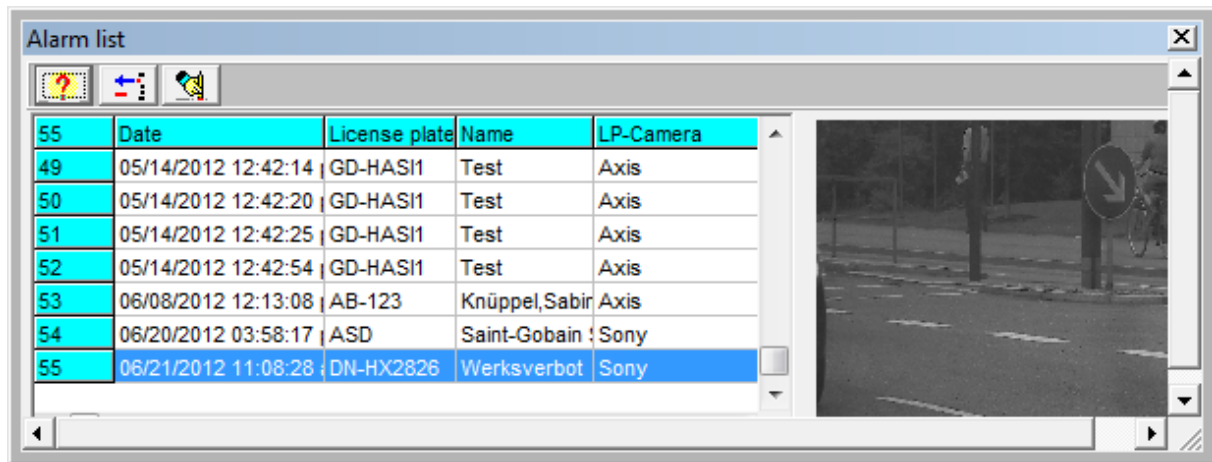
Opens the mask for deleting the list automatically at 1 o'clock.



Save settings

Submenu Alarm list

Here you see all events which produced an alarm.



	Date	License plate	Name	LP-Camera
55				
49	05/14/2012 12:42:14	GD-HASI1	Test	Axis
50	05/14/2012 12:42:20	GD-HASI1	Test	Axis
51	05/14/2012 12:42:25	GD-HASI1	Test	Axis
52	05/14/2012 12:42:54	GD-HASI1	Test	Axis
53	06/08/2012 12:13:08	AB-123	Knüppel,Sabir	Axis
54	06/20/2012 03:58:17	ASD	Saint-Gobain	Sony
55	06/21/2012 11:08:28	DN-HX2826	Werksverbot	Sony



Help
Opens the online help.



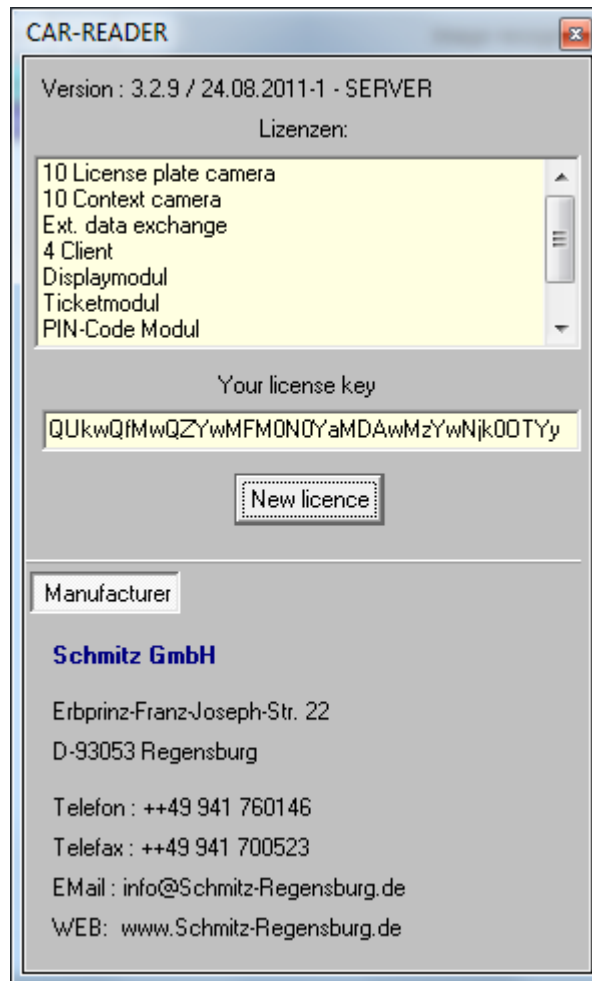
Delete entry



Delete list

Menu Info

In this menu you get info about the version, the date of the compilation, the mode, the license key of the CAR-READER and the manufacturer address.



Version number: 3.2.9

1. digit: shows the concept / design not downward compatible
2. digit: signifies the current file types, downward compatible after adjustments of the files
3. digit: displays the current OCR version

Program mode

- CAR-READER SERVER
- CAR-READER CLIENT

Licensing

The single features of the software CAR-READER are activated by the license key.
The software is only starting with a valid license key.

Info - Licenses:

Signifies the scope of licensing:

Number of license plate cameras, number of context cameras, third party system, number of clients ...

Info – License key:

The key available from the manufacturer

Info - New license:



With the first installation of the system or if you want to change the scope of the system the manufacturer needs the ID number. Enter the license key that you get from the manufacturer in the lower field.

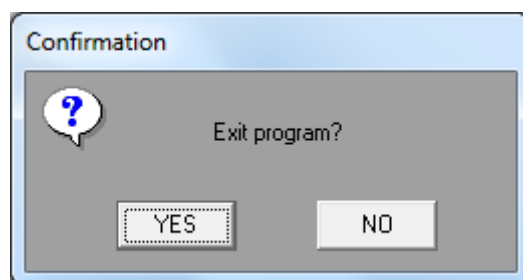


Online help



Change the operating language: Deutsch <---> English

Menu Close



Yes: the program CAR-READER is closed and the used memory released. The connection to the cameras are disconnected.

Attachment

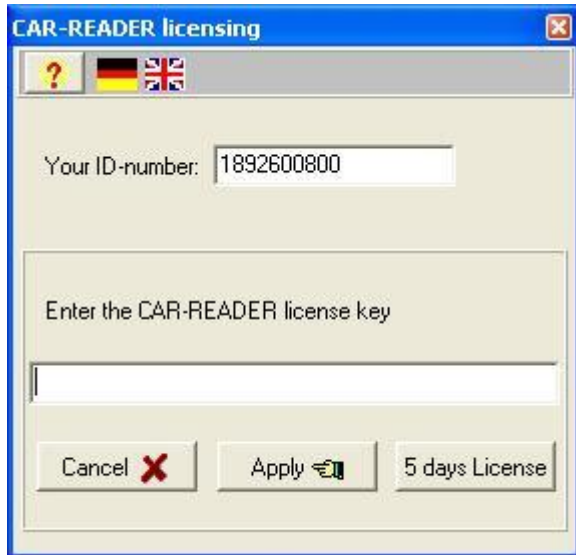
Proceeding when the hard drive crashed and a backup should be installed.

This is necessary because the licensing is dependent of the hard drive.

Make routine backup of the installation folder (usually c:\carreader\)

Copy the complete content of the installation folder (usually c:\carreader\)

Start the CARREADER.EXE it will show you the licensing window with the ID number.



Activate the 5 days license:



The software CAR-READER will then work the next 5 times 24 hours (runtime).
Ask your distributor for another full license.