BOSCH

Access Professional Edition

Configurator

en Configuration manual

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1 Overview

1.1 Modular Design

The Access Professional Edition System (hereunder referred to as **Access PE)** provides a self-contained access control for small and medium sized companies. It consists of several modules:

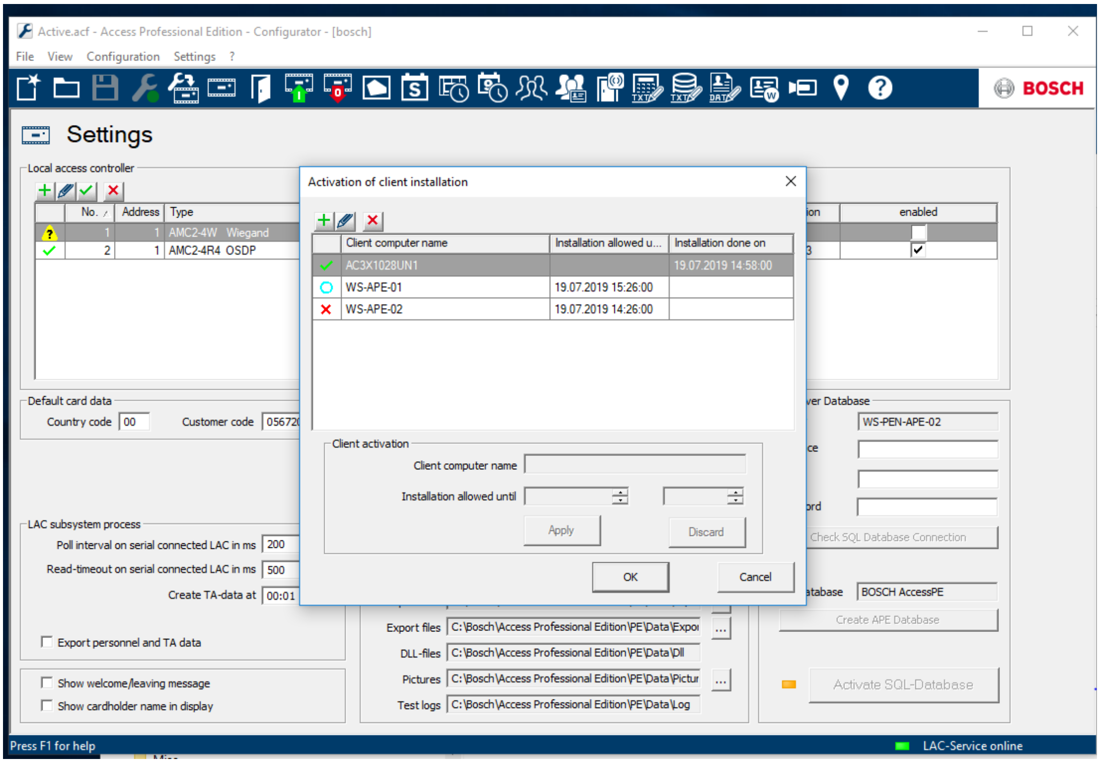
- LAC Service: a process which is in constant communication with the LACs (Local Access Controllers – hereafter referred to as Controllers). AMCs (Access Modular Controllers) are used as Controllers.
- Configurator
- Personnel Management
- Logviewer
- Alarm Management
- Video Verification

1.2 Server and Client Modules

The modules can be divided into server and client modules.
The LAC service needs to remain in constant contact with the controllers because firstly it constantly receives messages from them regarding movements, presence and absence of cardholders, secondly because it transmits data modifications, e.g. assignment of new cards, to the controllers, but mainly because it carries out meta-level checks (access sequence checks, anti-passback checks, random screening).
The Configurator should also run on the server; however it can be installed on client workstations and operated from there.
The modules Personnel Management and Logviewer belong to the Client component and can be run on the Server in addition, or on a different PC with a network connection to the server.
The following Controllers can be used.

- AMC2 4W (with four Wiegand reader interfaces) - can be extended with an AMC2 4W-EXT
- AMC2 4R4 (with four RS485 reader interfaces)

1.3 Client activation



Local access controller

	No.	Address	Type
?	1	1	AMC2-4W Wiegand
✓	2	1	AMC2-4R4 OSDP

Default card data: Country code 00; Customer code 05672

LAC subsystem process: Poll interval on serial connected LAC in ms 200; Read-timeout on serial connected LAC in ms 500; Create TA-data at 00:01

□ Export personnel and TA data

□ Show welcome/leaving message

□ Show cardholder name in display

Export files C:\Bosch\Access Professional Edition\PE\Data\Expo

DLL-files C:\Bosch\Access Professional Edition\PE\Data\Dll

Pictures C:\Bosch\Access Professional Edition\PE\Data\Pictur

Test logs C:\Bosch\Access Professional Edition\PE\Data\Log

enabled: □ ☑

ver Database: WS-PEN-APE-02

atabase: BOSCH AccessPE

Activation of client installation

	Client computer name	Installation allowed u...	Installation done on
✓	AC3X1028UN1		19.07.2019 14:58:00
○	WS-APE-01	19.07.2019 15:26:00	
✗	WS-APE-02	19.07.2019 14:26:00	

Client activation: Client computer name; Installation allowed until

1. In the **Configurator**, click **Settings**.
2. Click **Client activation**.

– A dialog box called "Activation of client installation" opens.

– The dialog box "Activation of client installation" shows the name and the period in which the client can be installed, as well as the time of the last successful installation.

Blue circle	– Installation is possible
Red cross	– Time expired – No installation
Green check mark	– Successful installation

1. Enter the name and the period in which the client installation should be possible.

During the Client installation, the entries will be checked and an error message will be generated if necessary.

2 General

2.1 Introduction

Access PE is an Access Control System which has been designed to offer the highest standards of security and flexibility to small and medium sized installations.

Access PE owes its stability and upgradeability to a 3-layer design: **The first layer** is the administration level with its controlling services. All administrative tasks are carried out here, e.g. the registration of new cards and the assignment of access rights.

The second layer is formed by the Local Access Controllers (LACs) which govern each group of doors or entrances. Even when the system is offline a LAC is able independently to make access b control decisions. LACs are responsible for controlling the entrances, governing door opening times or requesting PIN-codes at critical access points.

The third layer consists of card readers.

The communication between client, server, and cardholders is AES encrypted.

Access PE multi-user version allows multiple workstations to control the system. Customizable user rights levels regulate access and guarantee security. In this way it is possible, for example, to maintain card data from one workstation whilst using another to verify whether an employee is present in the building.

Access PE offers exceptionally flexible configuration of access rights, time models and entrance parameters. The following list gives an overview of the most important features:

Quick & Easy card Assignment

Cards (up to three) can be assigned to persons either manually or using a dialog reader connected to a PC via a serial connection. All assigned cards are active. When upgrading cards the old card is automatically overwritten and becomes invalid, thus preventing old cards from gaining access even if those responsible forgot or were unable to cancel them.

Access Rights (including Group Privileges)

Each person can inherit group privileges as well as having individual rights assigned to him. Privileges can be restricted by area and time to an accuracy of one minute. Group privileges can be used to grant and limit access rights for any or all cardholders simultaneously. Group privileges can be made dependent on time models which restrict their access to certain times of day.

Access tracking

By defining Areas it is possible to track and enforce a correct sequence of accesses. Even without monitoring, this configuration makes it possible to display a cardholder's location.

Anti-Passback

When a card has been read it can be blocked for a defined period from entering at the same access point. Hence it is possible to prevent "passback", where a user hands his card back across a barrier to provide access for an unauthorized person.

Automatic Cancelation of cards upon Expiration

Visitors and temporary staff frequently require access for a limited period only.

cards can be registered for a specific time period, so that they automatically lose their validity when that period expires.

Time Models and Day Models

A cardholder can be assigned to specific time models which regulate the hours in which that person has access. Time models can be defined flexibly using day models which determine how specific weekdays, weekends, holidays and special days deviate from normal working days.

Identification via PIN-Code

Instead of a card a person can use a special PIN-Code to enter.

Verification via PIN-Code

Particularly sensitive areas can be programmed to require additional PIN-Codes. This protection can in turn be made dependent on time models, so that, for instance, a PIN-Code is only required for access during holiday times or outside of defined working hours.

Flexible Door Management

Flexible parameterization of individual door models allows an optimum balance between security and comfort. The "shunt" or alarm suppression period can be individually specified to regulate for how long a door may remain open. In cooperation with an alarm system the access point can then optionally be locked.

Periodic Door Release

In order to facilitate access, door alarms can be shunted to release doors for specific periods. Door release periods can be defined manually or automatically via a time model.

Time and Attendance

Access points can be parameterized to record ingress and egress for time & attendance purposes.

Card Design

The graphical add-in module **Card Personalization** (CP) is fully integrated into the Access Control system to allow the operator to create cards without switching applications.

Assignment of Photos

If the add-in module **Card Personalization** (CP) is not activated photographic identification can nevertheless be imported and associated with cardholders.

Offline locking system

Areas which are not covered, for whatever reason, by the high-availability online access control system can nevertheless be locked offline.

Administration of video devices

Entrances can be equipped additionally with cameras to identify and track the movements of persons using them.

2.2 User Login

The following applications are available. See the respective User manuals for details:

Personnel Management

Configurator

Logviewer

Map and Alarm Management

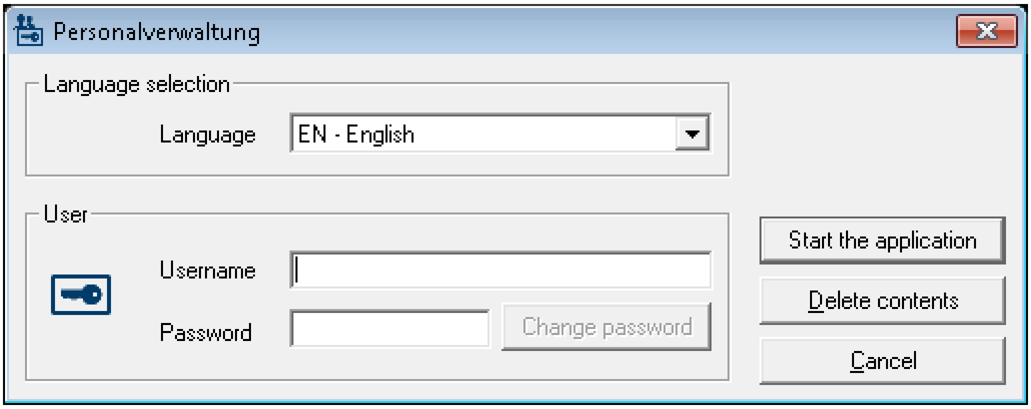
Video Verification

Notice!
A login from the client is only possible with the LAC service running on the server.

Client Login

The system's applications are protected from unauthorized use. The **default passwords** on first usage are:

- Username: **bosch**
- Password: **bosch**



Language: EN - English

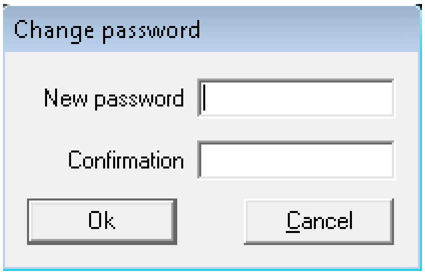
After entering a username and password, the button **Change Password** becomes active. After 3 wrong entries a time delay before the next logon will be the consequence. This applies for the buttons "Start the Application" and "Change Password".

The upper drop-down list can be used to select the desired interaction **language**. The default is that language which was used to install the application. If there is a change of user without restarting the application then the previous language is retained. For this reason it is possible for a dialog box to appear in an undesired language. In order to avoid this, please log in to Access PE again.
Access PE applications can be run in the following languages:

- English
- German
- French
- Japanese
- Russian
- Polish
- Chinese (PRC)
- Dutch
- Spanish
- Portuguese (Brazil)

Notice!
All facilities such as device names, labels, models and user-rights schemes are displayed in the language in which they were entered. Similarly buttons and labels controlled by the operating system may appear in the language of the operating system.

After clicking the **Change Password** button enter a new user name and password in this dialog:



Notice!
Do not forget to change the password!

The button **Start the application** checks the user's privileges and, based on these, starts the application. If the system is unable to authenticate the login then the following error message appears**: Wrong username or password!**

2.3 Tool bar of the Configurator

The following functions can be invoked via the menus, the icons in the toolbar or specific keyed shortcuts.

Function	**Icon/ Shortcut**	**Description**
Menu **File**		
New	Crtl + N	Clears all configuration dialog boxes (except for default settings) in order to define a new configuration.
Open...	Crtl + O	Opens a dialog box to select a different configuration for loading.
Save	Crtl + S	Saves changes into the current configuration file.
Save as...		Saves the current configuration into a new file.
Activate Configuration		Activates a loaded configuration and saves the hitherto valid configuration.
Send Configuration to LAC		Propagates saved configuration changes to the LAC-Service.
List recently valid configurations		Opens configurations directly, circumventing the **Open** function's selection dialog.
Exit		Shuts down Access PE Configurator.
Menu **View**		
Tool bar		Toggles display of the tool bar (default = on).
Status bar		Toggles display of the status bar at the bottom edge of the window (default = on).

Menu **Configuration**

General		Opens the **General Settings** dialog for setting up Controllers and general system parameters.
Input signals	I	Opens the dialog box for parametrizing **input** signals.
Output signals	O	Opens the dialog box for parametrizing **output** signals.
Entrances		Opens the **Entrances** dialog for parametrizing doors and card readers.
Areas		Opens the **Area Configuration** dialog for dividing the protected installation into virtual areas.
Holidays	S	Opens the **Holidays** dialog box for defining holidays and special days.
Day Models		Opens the **Day Models** dialog box for defining time periods within a day for the activation of access functions.
Time Models		Opens the dialog **Time Models** for defining timezones dependent on days of the week or calendar.
Personnel Groups		Opens the dialog box **Personnel Groups** for dividing personnel into logical groups.
Access Authorization Groups		Opens the dialog box **Access Authorization Groups** for defining groupings of authorizations to entrances.
Offline locking system		Opens the **Offline locking system** dialog for configuring special elements of the installation (Entrances, Time models, Authorization groups).
Display Texts	TXT	Opens the dialog box **Display texts** for editing the texts to be displayed at the card readers.
Log Messages	TXT	Opens the dialog box **Log Messages** for editing and categorizing log messages.

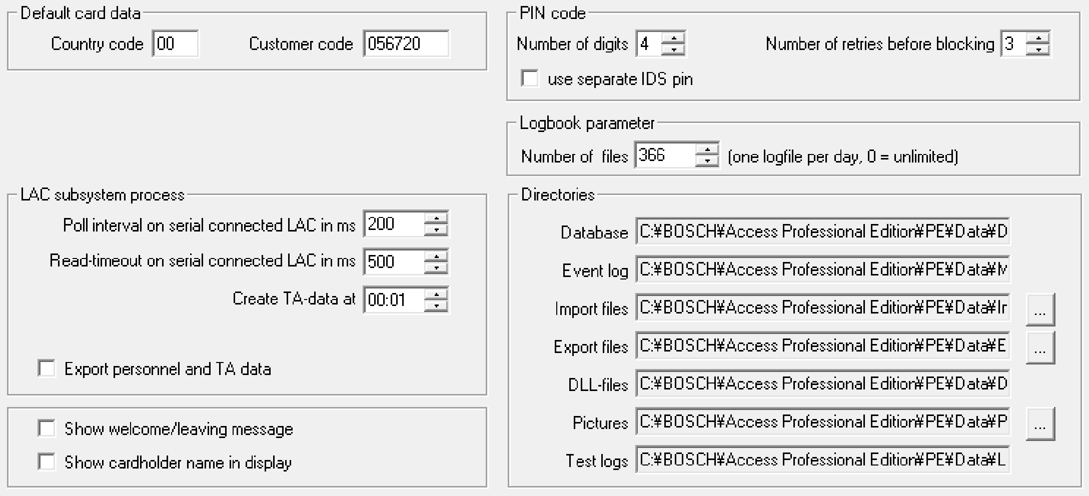
Additional personnel fields	DAT	Opens the dialog box **Additional personnel fields** for defining data fields for personnel.
Wiegand - cards	W	Opens the dialog box **Wiegand-cards** for defining the structures of card data.
Administering video devices	📹	Opens the **Video devices** dialog for configuring cameras to be used in video verification.
Map Viewer and Alarm management	📍	Opens the **Map Viewer** for an areal view of maps and control devices and the alarm list for alarm handling.

Menu **Settings**		
License activation		Opens a menu that enables to select or deselect licenses
Reset message and reader texts		Opens a request if the logbook and reader texts should be updated.

Menu **?** (**Help**)		
Help topics	?	Opens this help text.
About Access Professional Edition - Configurator		Displays general information about Access Professional Edition - Configurator

2.4 General system settings

General system settings are displayed below the list of controller settings. These are valid for all installations.



Default card data
Country code 00
Customer code 056720

PIN code
Number of digits 4
Number of retries before blocking 3
□ use separate IDS pin

Logbook parameter
Number of files 366 (one logfile per day, 0 = unlimited)

LAC subsystem process
Poll interval on serial connected LAC in ms 200
Read-timeout on serial connected LAC in ms 500
Create TA-data at 00:01
□ Export personnel and TA data

□ Show welcome/leaving message
□ Show cardholder name in display

Directories
Database C:¥BOSCH¥Access Professional Edition¥PE¥Data¥D
Event log C:¥BOSCH¥Access Professional Edition¥PE¥Data¥M
Import files C:¥BOSCH¥Access Professional Edition¥PE¥Data¥Ir
Export files C:¥BOSCH¥Access Professional Edition¥PE¥Data¥E
DLL-files C:¥BOSCH¥Access Professional Edition¥PE¥Data¥D
Pictures C:¥BOSCH¥Access Professional Edition¥PE¥Data¥P
Test logs C:¥BOSCH¥Access Professional Edition¥PE¥Data¥L

Parameter	Default	Description
Country Code	00	Some card data are appended to the manually entered card number.
Customer Code	056720	
Poll interval on serial connected LAC in ms	200	The time interval in milliseconds between pollings by the LAC-Service to verify intact connections to a controller.
Read-Timeout on serial connected LAC in ms	500	Range of values for poll interval: 1 to 500 Possible values for read-timeout: 1 to 3000
Create TA data at	00:01	Specification of the time at which the Time & Attendance data file should be created.
Export personnel and TA data	deactivated	When activated this option causes time & attendance data to written continuously to the export file. When not activated the data file is created at the time specified by the parameter **Create TA data at**.
The file containing attendance time-stamps is created in the following directory: C:\Program Files\Bosch\Access Professional Edition\PE\Data\Export Under the name **TA_<Current date YYYYMMDD>.dat**		
Show welcome/ leaving message	activated	Given appropriate reader type and settings (**Arriving**, **Leaving** or **Check ok** in the Entrances dialog) the reader will display those welcome and

Parameter	Default	Description
		leaving texts which are stored for the cardholder in the Personnel Data dialog of the Personnel Management application. Does not apply to Wiegand readers.
Show cardholder name in display	activated	Readers with display will show the **Display Name** as stored in the cardholder's Personnel Data. Does not apply to Wiegand readers.
Number of digits	4	Determines the number of digits a verification or arming PIN requires. This setting applies also to the door PIN which can be set during the configuration of entrances. Possible values: 4 to 8
use separate IDS PIN		If no separate IDS PIN is set, then a verification PIN can be used to arm the IDS. Only if the check box is selected do the input fields for the arming-PIN become active in the Personnel dialog screen. In this case the verification PIN can no longer be used to arm the IDS.
Number of retries before blocking	3	Number of failed attempts to enter the PIN. If the cardholder mistypes the PIN this many times then s/he will incur a system-wide block which can only be removed by an authorized system user in Personnel Management. Possible values: 1 to 9
Logbook parameter	366	Number logfiles per day Possible values: 180 to 9999. NOTE: If a value <180 is entered it will automatically change to the minimum value of 180.
Directory paths to: Database Log file Import files Export files DLL files Image data Test-Logging	C:\Program Files\BOSCH \Access Professional Edition\PE \Data... \Db \MsgLog	These are the default paths. The directories for import, export and image files can be changed.

Parameter	Default	Description
	\Import \Export \Dll \Pictures \Log	

Notice!
When using Wiegand controllers and readers, in order to use Identification-, Arming- or Door-PINs the Wiegand card definition **PIN or Card** needs to be activated.

3 Configurations

The composition of a system (what entrances there are where, how many readers and of what type, how access authorizations are set up etc.) is saved in special files. Any number of these configuration files (*.cfg) can exist – however, only the one with the filename ***active.cfg** can activate the current system. This makes it possible to test new scenarios, carry out test runs and carry out quick system changes.

3.1 Creating new configurations

All Access PE configurations are stored in the folder **C:\BOSCH\Access Professional Edition \PE\Data\Cfg** (unless non-default paths and folder names are chosen during installation). Two configuration files are created by the installation, namely **Active.acf** and **Default.acf**. Whereas Active.acf contains example data, which may be helpful to the user, Default.acf contains only predefined system data.
System data include:

- The area **--outside--**.
- Example holidays and special days
- The personnel groups **Employees** and **Visitors**
- Display texts for readers.
- Logbook texts

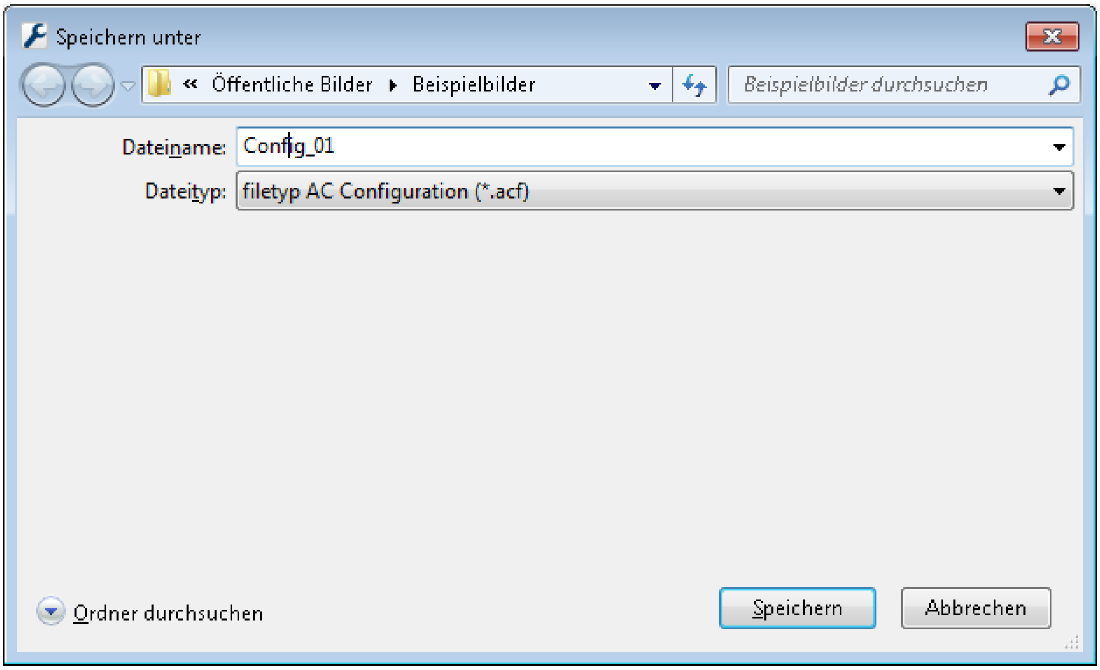
Upon startup Access PE always uses the configuration **Active.acf.**
A configuration may find itself in different states, and it is important to distinguish between them

- An **Active** configuration is one whose definitions, settings etc. are currently being used by the running system.
- An **Open** (loaded) configuration is one which is currently being edited by system users. It may later be stored in a separate .acf file and/or later activated, but **until it is activated it has no influence on the running system**.

Any number of configurations can be defined and stored in Access PE. Because new configurations can be created and modified independently of the running system, it is possible, for example, to define new areas which will be included in the monitored installation at a later date.

Using the 🗋 button in the toolbar the default configuration as **Untitled.acf,** with its basic settings, which can be opened (loaded). If modified to create a new configuration it should be saved under a different and appropriate name.

The 💾 button starts a file-saving dialog in the Cfg directory. The default filename **untitled.acf** should be replaced by a more explanatory filename.



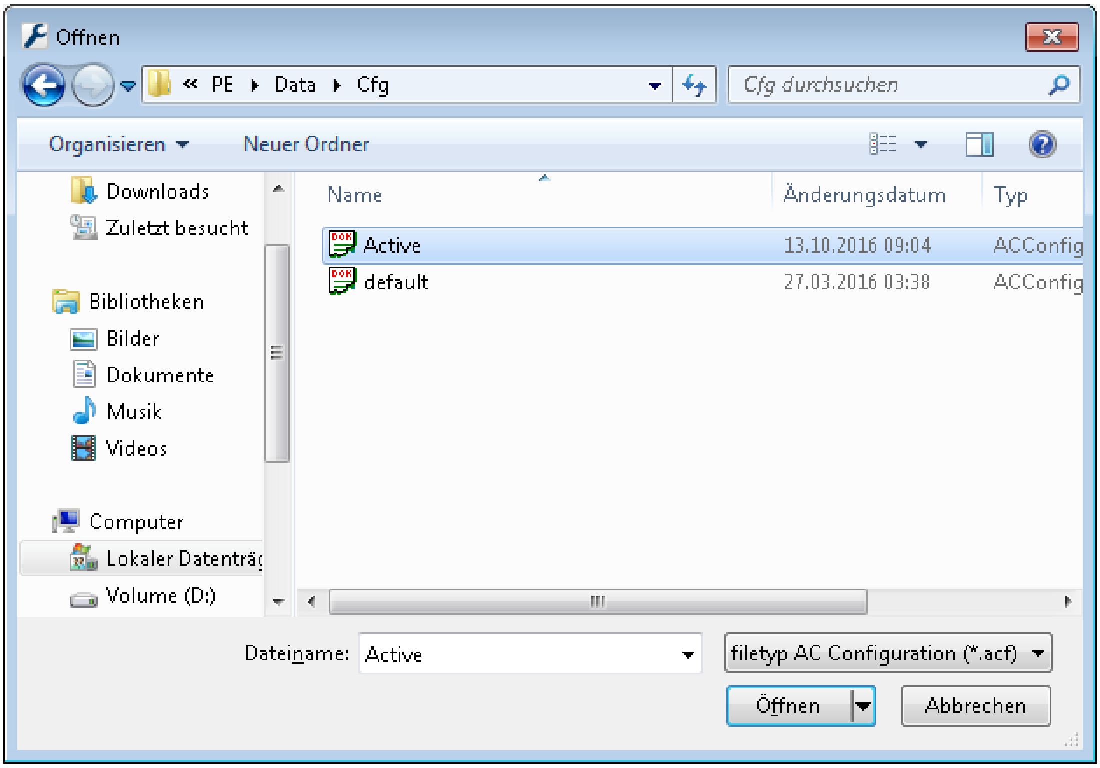
Dateiname: Config_01

Dateityp: filetyp AC Configuration (*.acf)

Speichern unter
« Öffentliche Bilder ▸ Beispielbilder
Beispielbilder durchsuchen
Ordner durchsuchen
Speichern
Abbrechen

3.2 Opening configurations

Configurator is always started with the configuration **Active.acf**. If a different configuration is to be used, then the 🗀 button can load an existing configuration from the folder **C:\BOSCH\Access Professional Edition\PE\Data\Cfg** (by default).



Name	Änderungsdatum	Typ
Active	13.10.2016 09:04	ACConfig
default	27.03.2016 03:38	ACConfig

Dateiname: Active

filetyp AC Configuration (*.acf)

If the user wishes to make changes to or expand an existing configuration to be activated at a later date, then s/he can open a basic configuration, modify it and then save it under a different name. In this way it is possible to re-use and expand upon previous configurations, and one does not have to start every time from the very basic settings in **default.acf.**

Notice!
The active configuration too can be saved as a working copy under a new name, and this loaded and worked on at a later date.

3.3 Activating a new configuration

Configurator offers the possibility of maintaining multiple configurations in multiple .acf files. The active configuration is always stored in the file **Active.acf** .

⚠ **Caution!**
As **active.acf** is overwritten when a new configuration is activated, it is urgently recommended that the user make a backup copy of the active configuration under a new filename.

Configuration files must be opened before they can be activated. Therefore a previously modified and saved configuration should be opened.
In order then to activate the opened configuration please proceed as follows, either:

- Menu: **File** > **Activate configuration** or
- Use the button in the toolbar.

The activation then proceeds in stages:

- First confirm the safety check.
  : Do you really want to replace the current configuration with the new configuration?
- The hitherto active configuration is backed up as a file with the name format: **$yyyyMMddhhmmss -Active.acf** (y = year; M = month; d = day; h = hour; m = minute; s = seconds).
- The currently open configuration is then stored under the filename **Active.acf** i.e. the old active configuration will be overwritten!

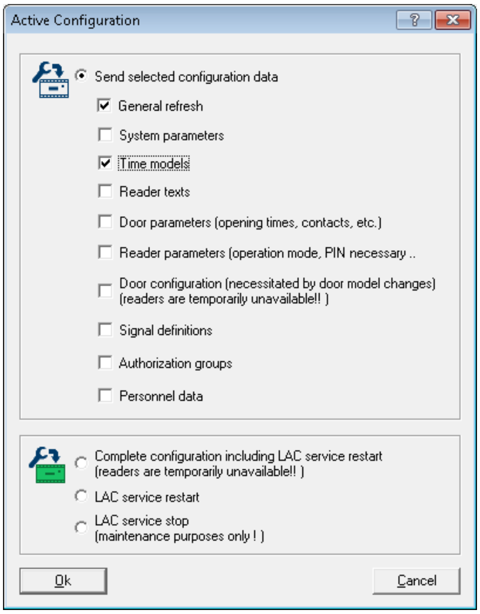
A information box shows the name of the saved file: **: New configuration was saved as <filename>!**

3.4 Propagating configurations to the controllers

After making changes in the active configuration **Active.acf** it is necessary to propagate these changes down to the controllers. This can be started in two ways:

- Menu **File** > **Send configuration to LAC service**
- Using the button in the toolbar

The following dialog appears, in which you can choose which configuration data will be propagated to the controllers.



● Send selected configuration data

☑ General refresh

□ System parameters

☑ Time models

□ Reader texts

□ Door parameters (opening times, contacts, etc.)

□ Reader parameters (operation mode, PIN necessary ..

□ Door configuration (necessitated by door model changes) (readers are temporarily unavailable!!)

□ Signal definitions

□ Authorization groups

□ Personnel data

○ Complete configuration including LAC service restart (readers are temporarily unavailable!!)

○ LAC service restart

○ LAC service stop (maintenance purposes only !)

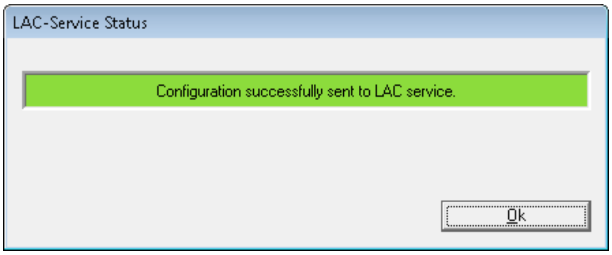
Modified and saved data are preselected. You may select further items or deselect already selected items.

When you have selected which data should be propagated to the controllers then click **OK**.

Configuration data	**Propagation to the LACs becomes necessary if...**
General refresh	... log messages, additional fields or card definitions have been modified.
System parameters	... LAC-Hardware has been modified.
Time models	... Holidays, Day or time models have been modified
Reader texts	... Display texts have been modified.
Door parameters	... at Entrances, one or more of the following have been modified – the opening time (in 1/10 sec.) – the door contact – data relating to door control (opening times, contacts, time profiles etc.)
Reader parameters	... at Entrances, one or more of the following have been modified – data for the entry or departure readers – alarm suppression time (in 1/10 sec.). – anti-passback behavior of the entrance – buttons to open the door
Door configuration	... at Entrances, the door model has been modified.

Configuration data	Propagation to the LACs becomes necessary if...
	Notice: Reinput and modification of the address (serial number, reader-type) can only be carried out in the input mask Define Entrance.
Signal definitions	... parametrization of input or output signals has been modified
Authorization groups	... authorization groups without time models have been modified, or a new time model added or deleted.
Personnel data	... personnel data has been added or modified, or access authorization groups or time models have been modified.
Complete configuration including LAC service restart	.. the initial configuration of Access PE has been concluded. A reset of the controller can also cause the complete configuration to be downloaded to the controllers.
LAC service restart	... in general settings the polling interval or the time for saving the TA data file has been modified.
LAC service stop	This option should only be used in exceptional circumstances, e.g during deinstallation in order to avoid a restart of the computer.

Configurator sends a command to the **: LAC Service** to propagate the configuration data to the controllers. The LAC Service is responsible for the communication to and from the controllers. This program is set up at installation time, as a Windows Service which is automatically started upon booting.
Successful propagation to the LAC Service is reported as follows:


LAC-Service Status

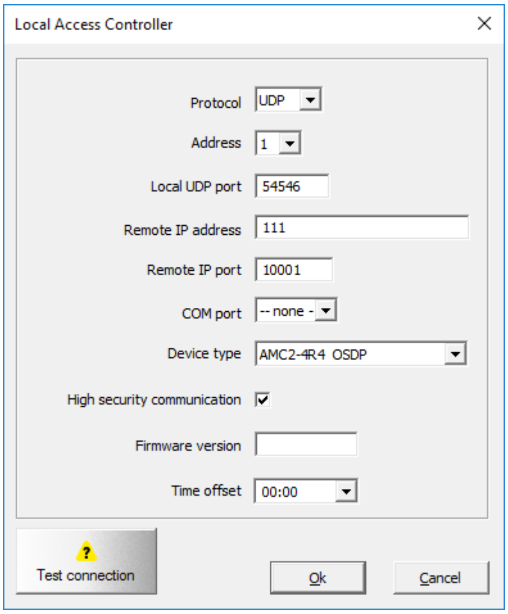
Configuration successfully sent to LAC service.

4 Controllers

The Local Access Controllers (LACs) are the points in the Access PE at which most access control decisions are made. Except for system-wide control functions, such as the access sequence check, the controllers can take independent decisions regarding who is granted access. For this reason, they have all access-related data in their own memory so that limited and restricted offline operation is also possible.
In the Access PE AMC2 (Access Modular Controller) controllers are used.

4.1 Defining and modifying new controllers

The buttons + (add) and ✎ (modify a selected list element) invoke a dialog box for configuring the interfaces between Access PE Server and the controllers


Local Access Controller

Protocol: UDP
Address: 1
Local UDP port: 54546
Remote IP address: 111
Remote IP port: 10001
COM port: -- none -
Device type: AMC2-4R4 OSDP
High security communication: ☑
Firmware version:
Time offset: 00:00

Notice!
The checkbox High Security Communication is displayed under “Device type”.
Before changing to another device type make sure to deactivate the checkbox first.

Every controller must have a protocol assigned to it. The following are settings are available:

COM Connection via a serial (COM) interface requiring the COM interface number (COMx)

CIP Connection via TCP/IP over COM requiring the virtual COM interface number (COMx); only available for LACi with IP/Serial transducer.

UDP Connection via UDP requiring the local UDP port and the IP-Address (or the network name under DHCP).

Notice!
Please ensure that when using CIP or UDP interfaces the DIL address switch on the controller at position **5** is set to **ON**.

Depending on which protocol is chosen different additional settings will be required, as shown in the following table:

Parameter	COM	CIP	UDP	Note
Address	1 to 8	1 to 8	always 1	When using COM or CIP the DIL-switch on the Controllers must have the same address setting.
Local UDP-Port	Deacti-vated	Deactivated	consecutive	The port via which the Access PE server is to receive data from the controller. A new controller will receive the next free port, depending on its position, but this entry can be overwritten.
Remote-IP-Address	Deacti-vated	Deactivated	IP address or network name	In networks using DHCP the newtwork name should be used, otherwise the IP address of the controller.
Remote-IP-Port	Deacti-vated	Deactivated	unmodifiable value 10001	The port on the controller to receive data from the server.
COM-Port	Pull-down list of COM-Ports	Pull-down list of COM-Ports	<none>	The number of the COM port on the Access PE server to which the controller is connected.
LAC-Type	Pull-down list of Controllers	Pull-down list of Controllers	Pull-down list of Controllers	The following controller types are available:
	AMC-4W Wiegand			with Wiegand reader interface

Para-meter	COM	CIP	UDP	Note
	AMC2-2W Wiegand			with RS485 and Wiegand reader interface
	AMC-4R4-BG900			with RS485 reader interface
	AMC-4R4-L-BUS			with RS485 reader interface
	AMC-4R4-OSDP			with RS485 reader interface
High Security Commu-nication	Checkbox for selection of controller specific, session based encryption with AES 128 between **Host and Controller**.			
Firmware version (Project)	none	none	none	may be used to specify the software version
Time offset	Combo box for specifying the time offset from the server in cases where the AMC is in a different time zone. Possible values are -12:00 to +12:00 in 30 minute intervals. All times transmitted from the server to the AMC (or vice versa) are adjusted by this offset. Local AMC times are used in event messages and can be viewed in the Event Log.			

Controller (LAC) Test

Having made the settings the reachability of each controller can be tested before saving. Thus any incorrect settings can quickly be found and corrected or completed.

The **Test LAC** button at the lower edge of the dialog box attempts to connect to the controller using the current settings. This test can also be performed, after defining the controller, by selecting it in the list box and clicking the ✓ button.

The test displays one of four results using the icons below, which are also shown in the first column of the list.

?	The controller has not yet been tested or is not enabled.
✓	Test was successful. A connection was made.
✗	Test was unsuccessful.
○	Status is still pending.

Notice!

These icons indicate the current status and are automatically updated. Attempts to reconnect can delay the display of the status update.

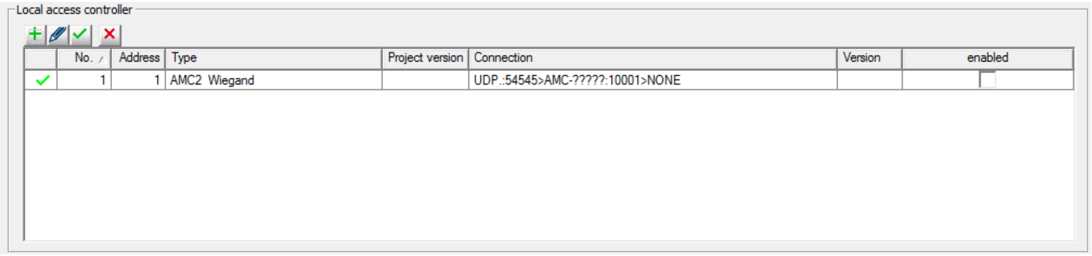
A controller test consists of various phases, some of which may be skipped:

- Startup the LAC-Services.
- Download the LAC-Program
- Wait states:
  - Read configuration data from the controller.
  - Receive a status message from the controller
- Display the result of the connection attempt.

Depending on the result, the **LAC-Service Status** dialog is displayed. After clicking **OK** the test result is displayed in the list.

4.2 Controller Settings

The dialog box **General Settings**, invoked by the button is where Local Access Controllers (LACs) are defined and configured.



Local access controller

	No.	Address	Type	Project version	Connection	Version	enabled
✓	1	1	AMC2 Wiegand		UDP.:54545>AMC-?????:10001>NONE		□

Buttons for the following functions are displayed across the top of the list:

+	**Add** a new controller.
✎	**Modify** the selected controller.
✓	**Test** the selected controller.
✗	**Delete** the selected controller.

The list field includes all created controller and shows the following informations:

Column	Contents	Description
	✗, ?, ✓, or ○	Result of the LAC Test: negative, not yet tested or successful
No.	1 to 128	Number of the controller.
Address	1 to 8	The configured address of the controller as set by its DIL switch. In the case of UDP protocol this is always 1.
Type	AMC-Wiegand AMC-4R4 BG900 AMC-4R4 L-Bus	Selected controller type.

Column	Contents	Description
	AMC-4R4 OSDP AMC2-2W	
Projectversion	Example: 37.50	Special project program version loaded by the Controller.
Connection	Example: UDP.: 54545>AMC-DEMO: 10001>NONE	Interface parameters: Protocol: local UDP-Port>Nework name or IP-Address: Remote IP-Port>COM-Port
Version	Example: 37.02	Program version loaded by the Controller.
Enabled	Activated or deactivated	If the checkbox is deactivated the LAC service won’t set up a connection to the AMC2. The AMC2 will work stand-alone.

The lower part of the dialog box contains general settings for all devices and applications in the Access PE installation.

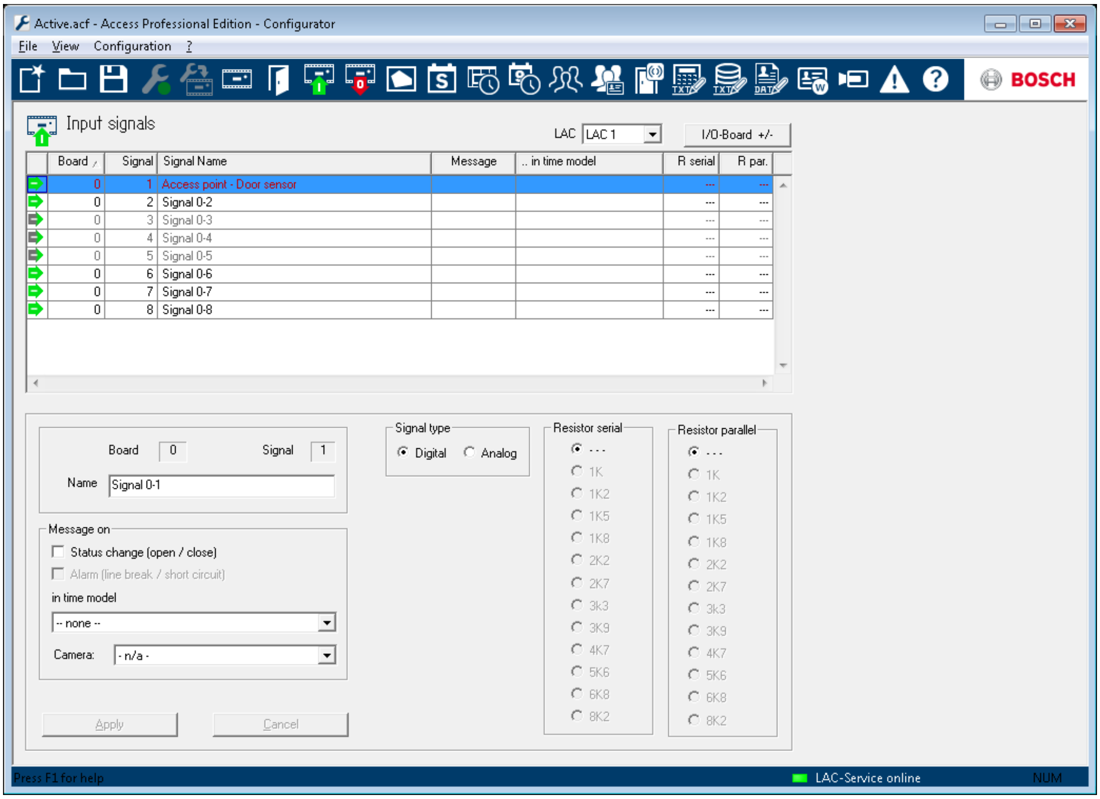
Notice!
After an installation or update the checkbox **Enabled** has to be clicked to activate the selected AMC2.

5 Signals

The controllers' input and output signals can be used, for example, to determine door states and control doors. Furthermore, these signals can also be used to associate additional control functions with access requests. This allows you to control and activate cameras, optical or acoustic signaling devices, and alarm systems.

5.1 Input signals

Whereas door control and other control signals, along with status messages, are configured under **Entrances,** the **Input Signals** dialog is concerned with the detailed definition of signal types and their monitoring.



Input signals

LAC: LAC 1

	Board	Signal	Signal Name	Message	.. in time model	R serial	R par.
➡	0	1	Access point - Door sensor			---	---
➡	0	2	Signal 0-2			---	---
➡	0	3	Signal 0-3			---	---
➡	0	4	Signal 0-4			---	---
➡	0	5	Signal 0-5			---	---
➡	0	6	Signal 0-6			---	---
➡	0	7	Signal 0-7			---	---
➡	0	8	Signal 0-8			---	---

Board: 0 Signal: 1

Name: Signal 0-1

Message on

☐ Status change (open / close)

☐ Alarm (line break / short circuit)

in time model: -- none --

Camera: - n/a -

Signal type: ● Digital ○ Analog

Resistor serial: ● ... ○ 1K ○ 1K2 ○ 1K5 ○ 1K8 ○ 2K2 ○ 2K7 ○ 3k3 ○ 3K9 ○ 4K7 ○ 5K6 ○ 6K8 ○ 8K2

Resistor parallel: ● ... ○ 1K ○ 1K2 ○ 1K5 ○ 1K8 ○ 2K2 ○ 2K7 ○ 3k3 ○ 3K9 ○ 4K7 ○ 5K6 ○ 6K8 ○ 8K2

When this dialog is invoked the first controller is always displayed. Please use the como-box **LAC** and the consecutive numbering scheme to select the desired controller. The standard controller definition process creates 8 input and 8 output signals. If the controller is able to handle more than these, then the button **: I/O boards +/-** can be used to create further signals. All defined signals appear in the list. The settings for each signal are shown in the various columns of the list as well as in the parameter controls for the selected signal which appear below the list. All settings can be carried out both in the list and in the parameter controls below the list, as described in the following table.

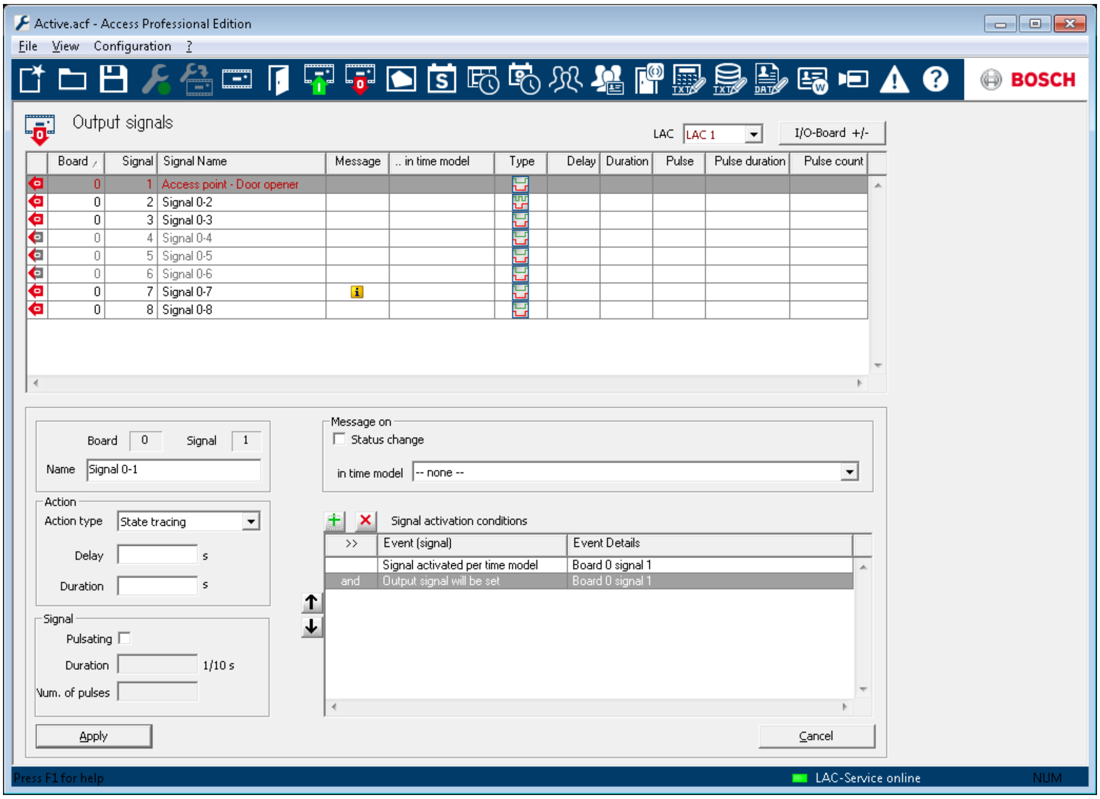
Column	Parameter	Description
1 (no label)	-	Describes the state of the signal: ➡ = Signal activated ➡ = Signal deactivated

Column	Parameter	Description
		By double-clicking on the icon the status can be toggled back and forth
Board	Board	Number of the board where the signal is located. 0 = Base board 1 = Extension board This parameter is not modifiable
Signal	Signal	Number of the signal on the board (1 to 16). This parameter is not modifiable
Signal name	Name	Name of the signal. In the standard settings each signal receives the name: Signal <Board-No.>-<Signal-No.> A double click in this column allows the user to edit the name.
Message	Message on... State change (open / close): Alarm:	Graphic display of the parameter setting in the List: i 🔊 (only possible for Signal type **Analog**) A double click in this column cycles through the message icons.
	Camera	A camera from the selection list can be assigned to certain input signals. When the relevant signal is activated, a log book message is created; you can also use this message to retrieve camera images.
- only on time model...	during time model	Shows the selected time model. A double click in this column allows the user to select from a list of time models
<none>	Signal type Digital Analog	The option **Analog** activates the radio buttons to select the resistance values.
R serial	Serial resistance	A double click in this column opens a list of resistance values. Selecting a serial or parallel resistance value automatically resets the signal type to Analog.
R par.	Parallel resistance	

Notice!
Not all of the listed values can be combined with each other - a statement regarding the use of suitable resistance pairs can be found in the installation manual for the AMC2 device.

5.2 Output signals

This dialog box is used to parameterize the output signals and, if necessary, to define further signal boards.



LAC: LAC 1

	Board	Signal	Signal Name	Message	.. in time model	Type	Delay	Duration	Pulse	Pulse duration	Pulse count
◀	0	1	Access point - Door opener								
◀	0	2	Signal 0-2								
◀	0	3	Signal 0-3								
◁	0	4	Signal 0-4								
◁	0	5	Signal 0-5								
◁	0	6	Signal 0-6								
◀	0	7	Signal 0-7	i							
◀	0	8	Signal 0-8								

Board: 0 Signal: 1
Name: Signal 0-1

Action
Action type: State tracing
Delay: s
Duration: s

Signal
Pulsating: □
Duration: 1/10 s
Num. of pulses:

Message on
□ Status change
in time model: -- none --

Signal activation conditions

>>	Event (signal)	Event Details
	Signal activated per time model	Board 0 signal 1
and	Output signal will be set	Board 0 signal 1

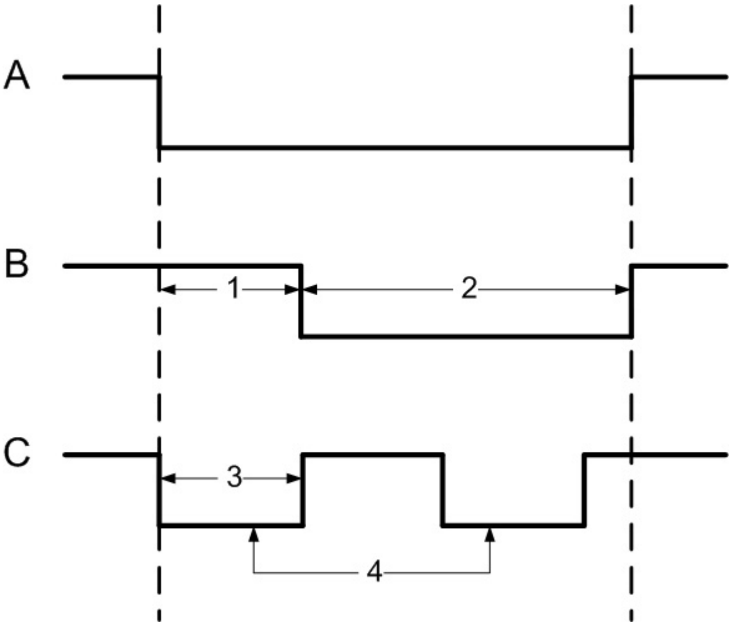
When this dialog is invoked the first controller is always displayed. Please use the combo-box **LAC** and the consecutive numbering scheme to select the desired controller. The standard controller definition process creates 8 input and 8 output signals. If the controller is able to handle more than these, then the button **: I/O boards +/-** can be used to create further signals.
All defined signals appear in the list. The settings for each signal are shown in the various columns of the list as well as in the parameter controls for the selected signal which appear below the list. All settings can be carried out both in the list and in the parameter controls below the list, as described in the following table.
Along with the settings described here it is possible to define additional **conditions** which must be fulfilled in order to activate the output signal.

Column	Parameter	Description
1 (no name)	-	Describes the state of the signal: ◀ = Signal activated ◁ = Signal deactivated

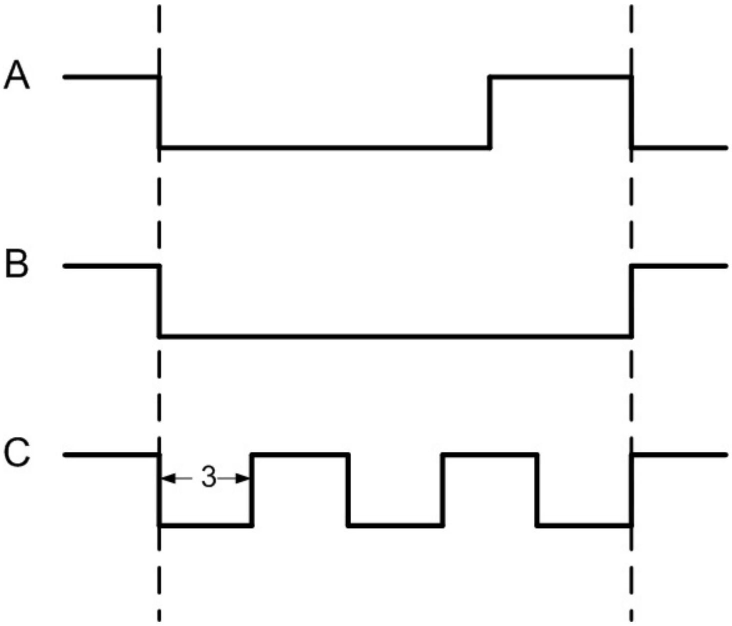
Column	Parameter	Description
		By double-clicking on the icon the status can be toggled back and forth.
Board	Connection	Number of the board where the signal is located. 0 = Base board 1 = Extension board This parameter is not modifiable.
Signal		Number of the signal on the board (1 to 16). This parameter is not modifiable.
Signal Name	Name	Name of the signal. In the standard settings each signal receives the name: Signal <Board-No.>-<Signal-No.> Signals which have been defined and activated in the **Define entrance** dialog are displayed here with their entrance names and their signal descriptions. A double click in this column allows the user to edit the name.
Message	Message on... State change	Graphic display of the parameter setting in the List: ℹ A double click in this column toggles the setting on and off.
- only in time model...	during time model	Display and selection of the time model.
Type	Action type: Momentary Follow state Toggle	Three action types are available: ⎍ ⎍ ⎍ A double click in this column cycles through the action types in the order shown here.
Delay	Delay	Delay in seconds before the signal is transmitted [0 - 9999].

Column	Parameter	Description
Duration	Duration	Delay in seconds before the signal is transmitted [0 - 9999 ; 0 = always or until halted by a cancellation message.
Pulse	Pulsating	Activates pulse transmission, otherwise the signal is transmitted at a constant rate. A double click activates this option but marks it as undefined with a ⚠ icon until duration and number of pulses have been defined. Thereafter it is marked with a ✓.
Pulse duration	Duration	Duration of the pulse.
Pulse count	Num. of pulses	Number of pulses per second.

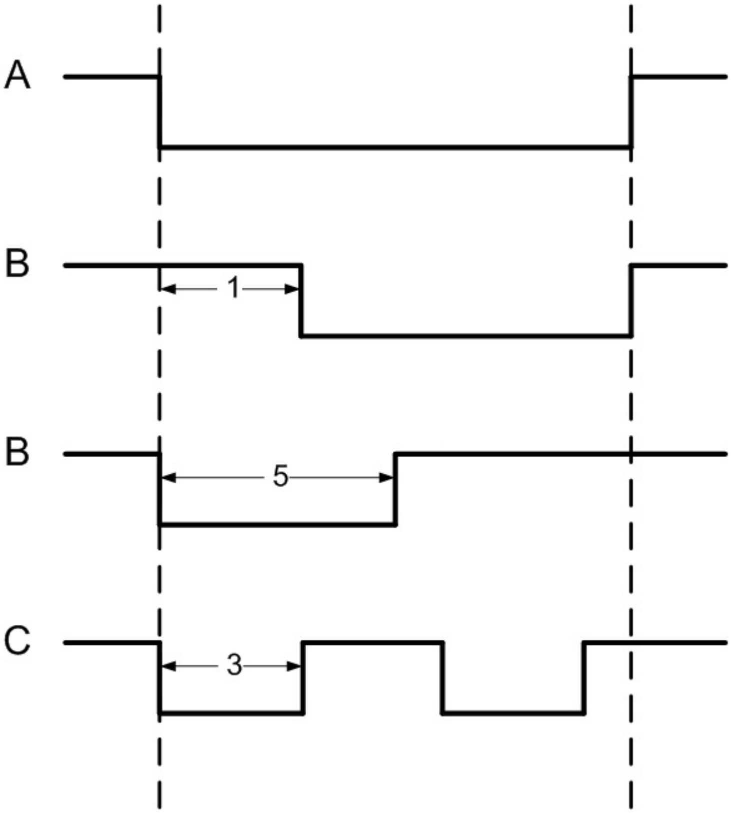
Actiontype: Momentary



Actiontype: Toggle



Actiontype: Follow state

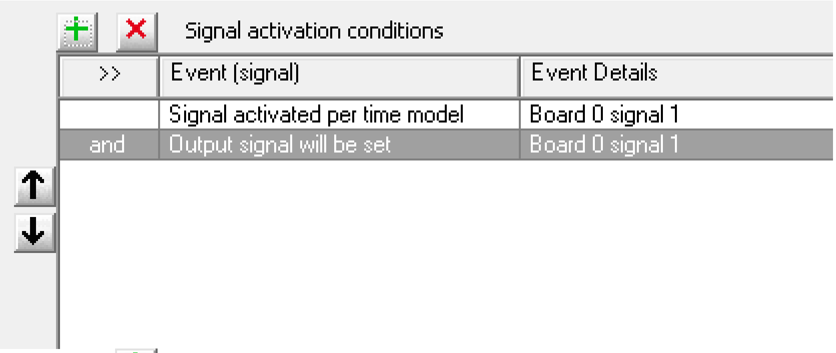


A =	polled state
B =	steady
C =	pulsed
1 =	delay time
2 =	action period

3 =	pulse width
4 =	pulse count (= 2)
5 =	max. activation time

5.3 Defining conditions for output signals

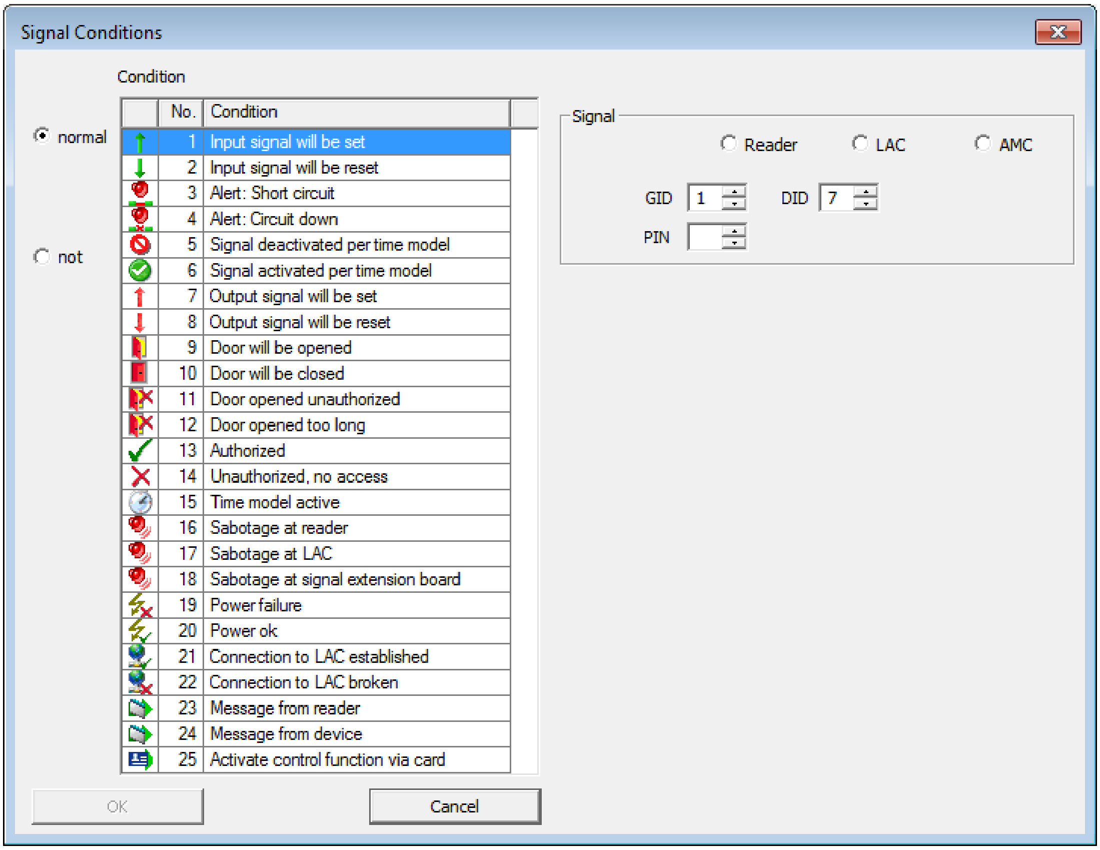
The dialog box **Output signals** offers, apart from settings, a way of defining additional conditions which allow the transmission of output signals only under specific circumstances. These special conditions are defined in the lower-right dialog area for those signals selected in the main list.



Signal activation conditions

>>	Event (signal)	Event Details
	Signal activated per time model	Board 0 signal 1
and	Output signal will be set	Board 0 signal 1

Press the ✚ button to open the dialog below. You can use this dialog to configure the relevant conditions.



Condition

● normal

○ not

No.	Condition
1	Input signal will be set
2	Input signal will be reset
3	Alert: Short circuit
4	Alert: Circuit down
5	Signal deactivated per time model
6	Signal activated per time model
7	Output signal will be set
8	Output signal will be reset
9	Door will be opened
10	Door will be closed
11	Door opened unauthorized
12	Door opened too long
13	Authorized
14	Unauthorized, no access
15	Time model active
16	Sabotage at reader
17	Sabotage at LAC
18	Sabotage at signal extension board
19	Power failure
20	Power ok
21	Connection to LAC established
22	Connection to LAC broken
23	Message from reader
24	Message from device
25	Activate control function via card

Signal

○ Reader ○ LAC ○ AMC

GID 1 DID 7

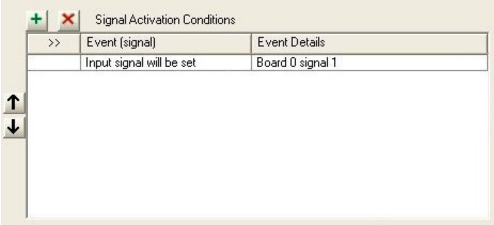
PIN

Depending on which activation condition is chosen it may be necessary to enter further information, e.g. the name of the door reader, before the dialog can be confirmed by clicking **OK**.

You can apply any number of conditions to each signal. You must reopen the dialog for each new condition by pressing the + button.

Notice!
It is only possible to select those signals and installations (entrances, readers, doors) which are connected to the controller whose output signal you are parameterizing.

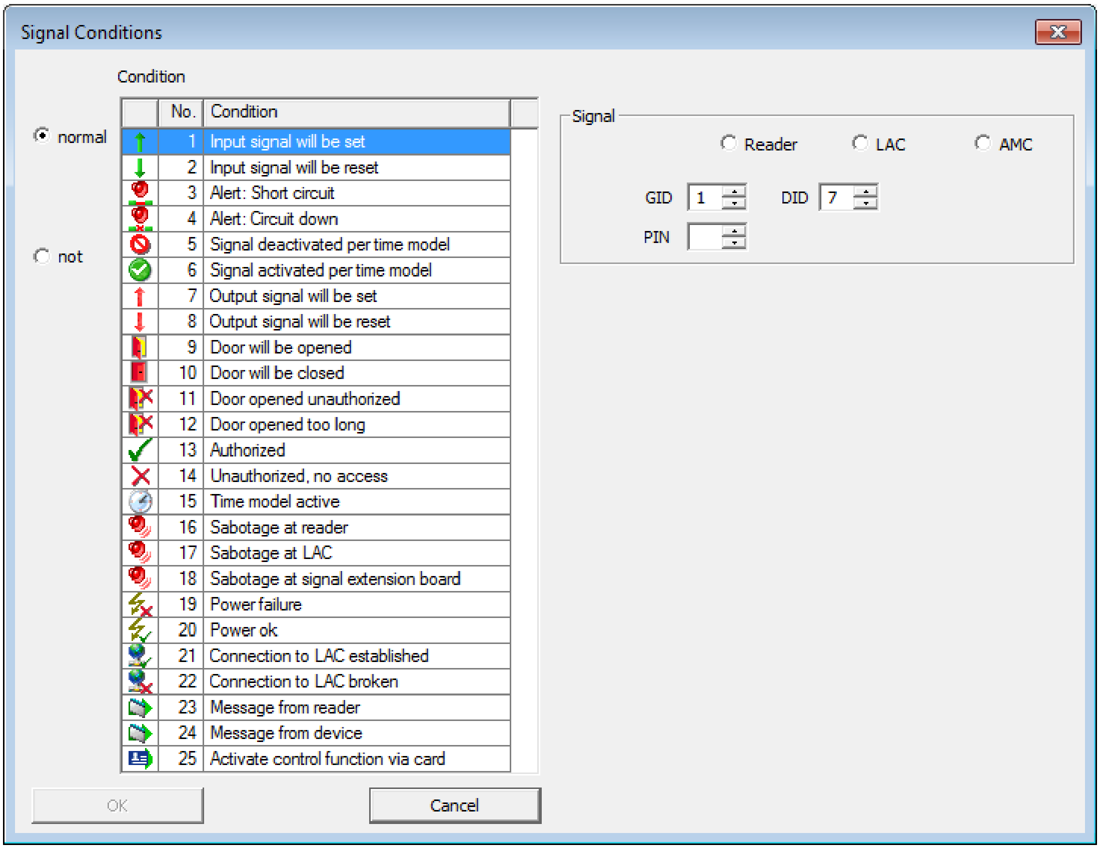
When defining the condition you can choose between the modes **normal** (if the condition needs to be fulfilled) and **not** (if the condition must not be fulfilled).



Signal Activation Conditions

>>	Event (signal)	Event Details
	Input signal will be set	Board 0 signal 1

Further conditions are made dependent on the first by choosing one of the operators **and**, **and not**, **or** or **or not**.



Signal Conditions

Condition

● normal
○ not

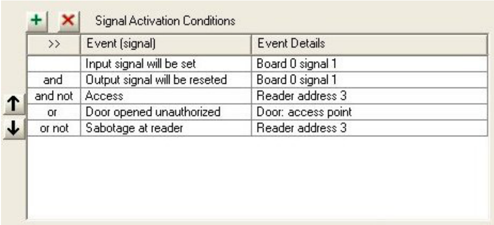
No.	Condition
1	Input signal will be set
2	Input signal will be reset
3	Alert: Short circuit
4	Alert: Circuit down
5	Signal deactivated per time model
6	Signal activated per time model
7	Output signal will be set
8	Output signal will be reset
9	Door will be opened
10	Door will be closed
11	Door opened unauthorized
12	Door opened too long
13	Authorized
14	Unauthorized, no access
15	Time model active
16	Sabotage at reader
17	Sabotage at LAC
18	Sabotage at signal extension board
19	Power failure
20	Power ok
21	Connection to LAC established
22	Connection to LAC broken
23	Message from reader
24	Message from device
25	Activate control function via card

Signal

○ Reader ○ LAC ○ AMC

GID 1 DID 7

PIN

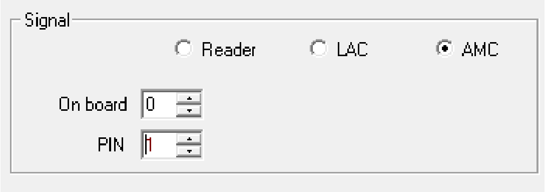
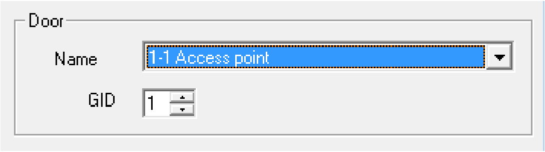
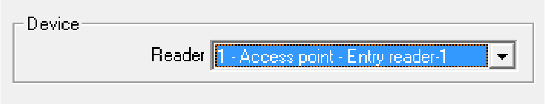
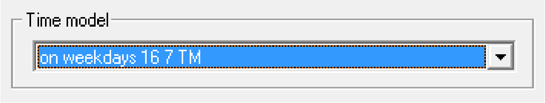
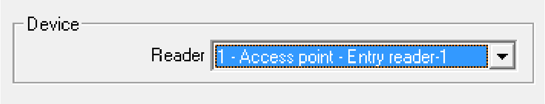
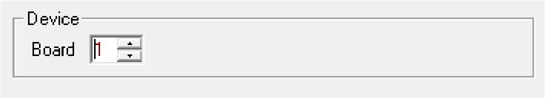


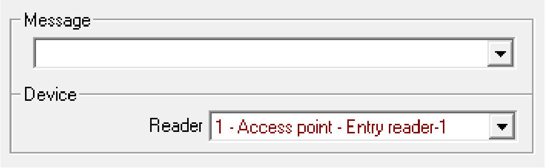
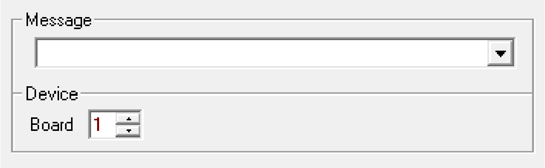
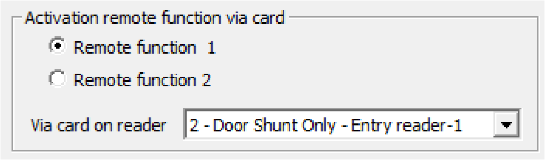
Signal Activation Conditions

>>	Event (signal)	Event Details
	Input signal will be set	Board 0 signal 1
and	Output signal will be reseted	Board 0 signal 1
and not	Access	Reader address 3
or	Door opened unauthorized	Door: access point
or not	Sabotage at reader	Reader address 3

The conditions are processed in the order they are listed. If this order does not reflect the procedure required, conditions can be repositioned. Select the relevant condition from the list and then reposition it by pressing the ↑ or ↓ button.

What supplementary information is required for which condition can be found in the following table:

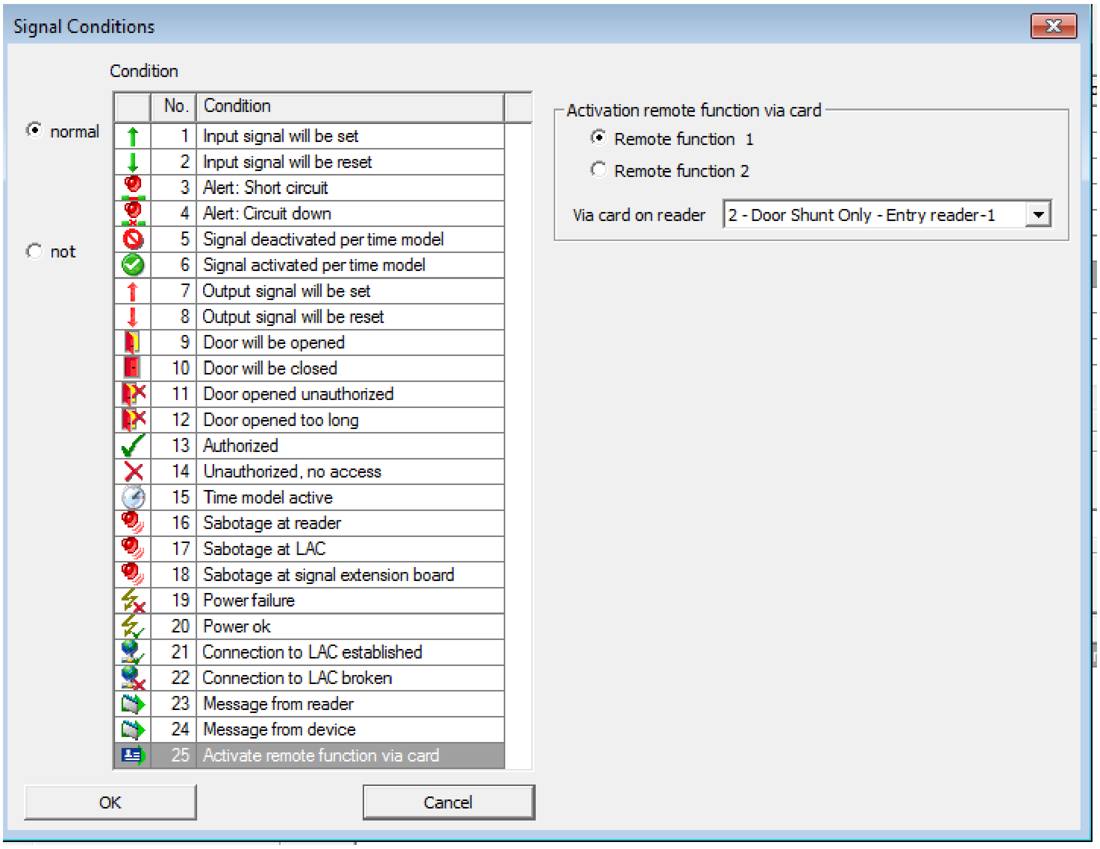
Condition	**Further information required**
Input signal will be set	Information about the device type where the signal is located. Selection of the board. Selection of the connection.  Signal ○ Reader ○ LAC ● AMC On board 0 PIN 1
Input signal is set	
Alert: Short circuit	
Alert: Connection broken	
Signal deactivated by time model	
Signal activated by time model	
Output signal will be set	
Output signal will be reset	
Door will be opened	Selection of the entrance. GID (Group ID) is set automatically.  Door Name 1-1 Access point GID 1
Door will be closed	
Door opening unauthorized	
Door open too long	
Access	Selection of the reader.  Device Reader 1 - Access point - Entry reader-1
Unauthorized, no access	
time model active	Selection of the time model.  Time model on weekdays 16 7 TM
Sabotage at reader	Selection of the reader.  Device Reader 1 - Access point - Entry reader-1
Sabotage at LAC	No further information necessary.
Sabotage at signal extension board	Selection of the board.  Device Board 1

Condition	Further information required
Power failure	No further information necessary.
Power ok	
Connection LAC -> APE established	
Connection LAC -> APE broken	
Message from reader	Selection of the message from the predefined list. Selection of the reader.  Reader 1 - Access point - Entry reader-1
Message from device	Selection of the message from the predefined list. Selection of the board.  Board 1
Activate control function via card	Set an output based on an authorization given to a cardholder. See chapter **Activate control function via card**.  Activation remote function via card ● Remote function 1 ○ Remote function 2 Via card on reader 2 - Door Shunt Only - Entry reader-1

5.3.1 Activate control function via card

This control function enables a person to trigger two different output signals.
To use this option the following requirements must be met:

- A person with the right to activate control functions must be configured.
- Their cards must be valid and allow access to the entrance.
- Under **Signal conditions** the output signal **25 - Activate remote function via card** must be selected.
- The remote function must be selected and a reader must be assigned.



Signal Conditions

Condition

● normal

○ not

	No.	Condition
↑	1	Input signal will be set
↓	2	Input signal will be reset
●	3	Alert: Short circuit
●	4	Alert: Circuit down
⊘	5	Signal deactivated per time model
✓	6	Signal activated per time model
↑	7	Output signal will be set
↓	8	Output signal will be reset
	9	Door will be opened
	10	Door will be closed
✗	11	Door opened unauthorized
✗	12	Door opened too long
✓	13	Authorized
✗	14	Unauthorized, no access
	15	Time model active
●	16	Sabotage at reader
●	17	Sabotage at LAC
●	18	Sabotage at signal extension board
✗	19	Power failure
✓	20	Power ok
✓	21	Connection to LAC established
✗	22	Connection to LAC broken
	23	Message from reader
	24	Message from device
	25	Activate remote function via card

Activation remote function via card

● Remote function 1

○ Remote function 2

Via card on reader: 2 - Door Shunt Only - Entry reader-1

How to proceed:

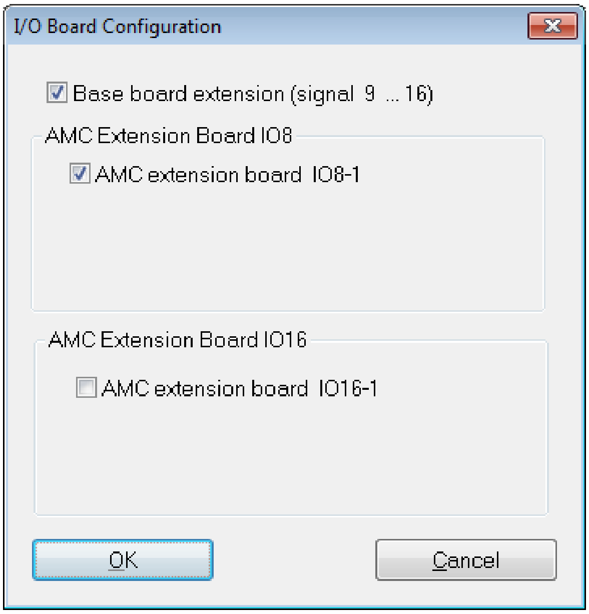
- Present the card to the reader. The authorization of the person will be checked.
- If authorized, the output signal will be set as configured.

5.4 Creating Extension boards

You can configure extension boards in the dialogs for both **input signals** and **output signals**. The settings configured in one dialog will be activated in the other.
You can use and configure three types of extension board in the Access PE access control system – all three types are processed via one of the signal dialogs.

- **AMC2 4W-EXT** - to extend the interfaces of a Wiegand AMC (AMC2 4W)
- **AMC2 8I-8O-EXT** - 8 further signals each
- **AMC2 16I-16O-EXT** - 16 further signals each

Above the list window please select the desired Controller from the **LAC** combo-box. These controllers are created with 8 signals on the main board (=0).
To create the extension board click the button marked **I/O Board +/-** , which will bring up the following dialog:



I/O Board Configuration

☑ Base board extension (signal 9 ... 16)

AMC Extension Board IO8

☑ AMC extension board IO8-1

AMC Extension Board IO16

□ AMC extension board IO16-1

By checking one or two of the boxes the following settings can be made:

- **AMC Main Board** (Signals 9 - 16)
  Creates a Wiegand Extension board **AMC2 4W-EXT**.
  This board has the same interfaces as an AMC2-4W controller (4 Wiegand reader interfaces, 8 input and 8 output signals). However it can not function independently and must be connected to an AMC2-4W.
  This extension can only be used with an AMC2-4W.
  An AMC2 4W-EXT can be configured with **3** additional IO-Boards.
  In the list field for the input and output signals the extension board, like the controller itself, is given the board number 0, and the signals numbered 9 through 16.
- **AMC Extension Board IO8**
  Board with 8 input and 8 output signals as an extension to the controller's interfaces.
  This board can be connected to any AMC2 controller and, when used with an AMC2-4W controller, can even be combined with a Wiegand extension board AMC2 4W-EXT
  In the list field of the input/output signals the extension board is created with the board number 1 and signals numbered 1 through 8.
- **AMC Extension Board IO16**
  Board with 16 input and 16 output signals as an extension to a controller's own interfaces.

This board can be connected to any AMC2 controller and, when used with an AMC2-4W controller, can even be combined with a Wiegand extension board AMC2 4W-EXT
In the list field of the input/output signals the extension board is created with the board number 1 and signals numbered 1 through 16.

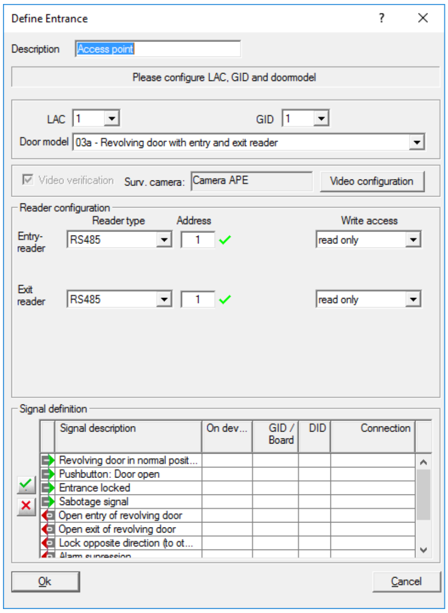
Notice!
The settings made here for **I/O boards** apply equally to input and output signals, and can be made in either of the two dialogs.

6 Entrances

When we talk about entrances, we always mean a whole made up of several components that belong to an access control system. Along with the door (which can also be a turnstile, a mantrap, a barrier or an elevator), the system also includes one or more readers and potentially buttons and control units (bolts, motorlocks etc.). The system can also contain optical or acoustic signaling devices or cameras as additional control functions.

6.1 Creating and modifying door models

A new entrance can be defined using the ✚ button or via the context menu within the list (right-click and select **New Entrance**). The entrance name, the door model or device addresses of the selected door can be edited using the ✎ button, via double click or again via the context menu (right-click and select **Change Entrance**).



Description: Access point

Please configure LAC, GID and doormodel

LAC: 1
GID: 1
Door model: 03a - Revolving door with entry and exit reader

☑ Video verification
Surv. camera: Camera APE

Reader configuration

	Reader type	Address		Write access
Entry-reader	RS485	1	✓	read only
Exit reader	RS485	1	✓	read only

Signal definition

Signal description	On dev...	GID / Board	DID	Connection
Revolving door in normal posit...				
Pushbutton: Door open				
Entrance locked				
Sabotage signal				
Open entry of revolving door				
Open exit of revolving door				
Lock opposite direction (to ot...				
Alarm supression				

When defing an new entrance a name must be given, which should be unique and as descriptive as possible, because it will be used to define authorization groups and individual access rights in Personnel Management.

It is also necessary to select the number of the controller to which this entrance is connected, and the Group ID (GID). In general only the number of the controller requires attention, because Access PE automatically assigns the next free GID. A suitable door model must be chosen from the combo-box **Door model**. Please consult the Appendix for a table of predefined door models and their functionalities.

Depending on the door model combo-boxes are displayed for entry and exit readers, where reader types must be selected. Each reader must receive a unique address within its controller. For readers with **Wiegand** interface only the **number of its own controller's interface** is required. For readers with **RS485** interface the assigned **DIP-address** is essential.

Notice!

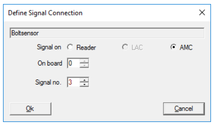
Please ensure that the reader addresses concur with the devices actually installed.

You can connect a maximum of four readers of type **AMC-Wiegand**, and eight of type **AMC-RS485** and **LACi.**

Use of reader address 9:
Reader address 9 has been set up as an aid to configuration, and serves as a buffer when rearranging parameters. If you have assigned all the reader addresses of a controller but still need to rearrange the parameters, then you can temporarily move a reader to address 9 in order to free another address.
Example: You wish to swap readers 4 and 7. As you can not use the same address twice proceed by assigning reader 4 to address 9, move reader 7 to address 4, and finally move reader 9 (original reader 4) to address 7.

Signal definition

Having selected the door model, all possible input and output signals are displayed in the list box. By selecting one of the elements and clicking the ✓ button to the left of the list, or by double clicking on the list element, you will invoke a dialog box for the definition of signals.



Define Signal Connection

Boltsensor

Signal on ○ Reader ○ LAC ● AMC

On board 0

Signal no. 3

The signal selected from the list box is displayed for orientation. The effect of the signal is defined in the default settings of the parametrized controllers, but can be modified here if required.
Additionally displayed are the board from which the signal emanates, and the number of the signal interface. For the enumeration of signals on the controller or an extension board please consult the relevant installation handbook for that device.

Notice!
You should ask the installing technician for a wiring plan/listing for the signals, which will enable you to parametrize the signals in Access PE accordingly.
False correspondences to physical wiring can cause considerable problems with the control of entrances and the correct processing of their signals.

The dialog box requires you to choose between DCU (Door Controler Unit), reader, LAC or AMC. If you choose DCU or reader it will be necessary to enter the GID and DID of the device. The following rules apply here:

- **Reader**
  - GID = GID of the reader at the entrance
  - DID = 1 for the first **entrance** reader, = 2 for the second **entrance** reader, = 3 for the first **exit** reader, = 4 for the second **exit** reader
  - Signal No. = Signal at the reader 1 ... 4
- **LAC**
  - Signal No. = Signal at the LAC 1 ... 16
- **AMC**
  - On board = Board No.. 0 or 1
  - Signal No. = Signal at the AMC 1 ... 8 or, in the case of extension boards, 1 ... 16

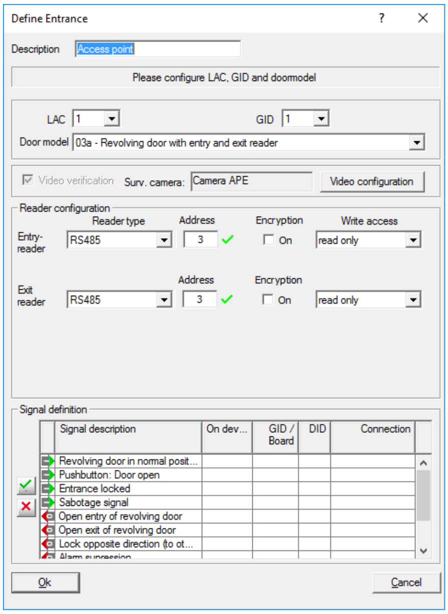
In the list box the parametrized connections are shown in their respective columns. The first colums contains icons representing the status of the signals:

➡	Input signal not set
➡	Input signal set

⬅	Output signal not set
⬅	Output signal set

A previously defined signal can be deleted using the ✕ button.

The example given above shows the editing of a door model using a **Wiegand** reader.
In case of an **OSDP reader** the dialog looks as follows:



Define Entrance

Description: Access point

Please configure LAC, GID and doormodel

LAC: 1 GID: 1

Door model: 03a - Revolving door with entry and exit reader

☑ Video verification Surv. camera: Camera APE

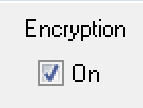
Reader configuration

	Reader type	Address	Encryption	Write access
Entry-reader	RS485	3 ✓	□ On	read only
Exit reader	RS485	3 ✓	□ On	read only

Signal definition

Signal description	On dev...	GID / Board	DID	Connection
Revolving door in normal posit...				
Pushbutton: Door open				
Entrance locked				
Sabotage signal				
Open entry of revolving door				
Open exit of revolving door				
Lock opposite direction (to ot...				
Alarm supression				

As a standard the **Encryption option** is not selected. For usage with the **OSDPv2 secure** supported readers select the **Encryption option:**



Encryption
☑ On

The selection of OSDP readers:

OSDP	OSDP standard reader
OSDP Keyb	OSDP reader with keyboard
OSDP Keyb+Disp	OSDP reader with keyboard and display

The following OSDP readers are supported:

OSDPv1 - unsecure mode	LECTUS duo 3000 C - MIFARE classic LECTUS duo 3000 CK - MIFARE classic LECTUS duo 3000 E - MIFARE Desfire EV1 LECTUS duo 3000 EK - MIFARE Desfire EV1
OSDPv2 - unsecure and secure mode	LECTUS secure 2000 RO LECTUS secure 4000 RO LECTUS secure 5000 RO

Notice!
When using Bosch coded Mifare cards with an OSDP reader, it is essential to select the card type **Mifare (63 Bit)** to activate the Bosch coding.

It is not permitted to connect different product families (i.e. **LECTUS duo** or **LECTUS secure**) with one OSDP bus. Make sure to configure either “encrypted” or “unencryted” at one OSDP bus, but no mixture.

Warning!
ATTENTION! IMPORTANT NOTICE!
A key is generated for encrypted data transmission to the OSDP reader. Save this file
d:...\BOSCH\Access Professional Edition\PE\cfg\Active.acf
by all means to a safe local drive.
This file is needed to restore an existing installation.

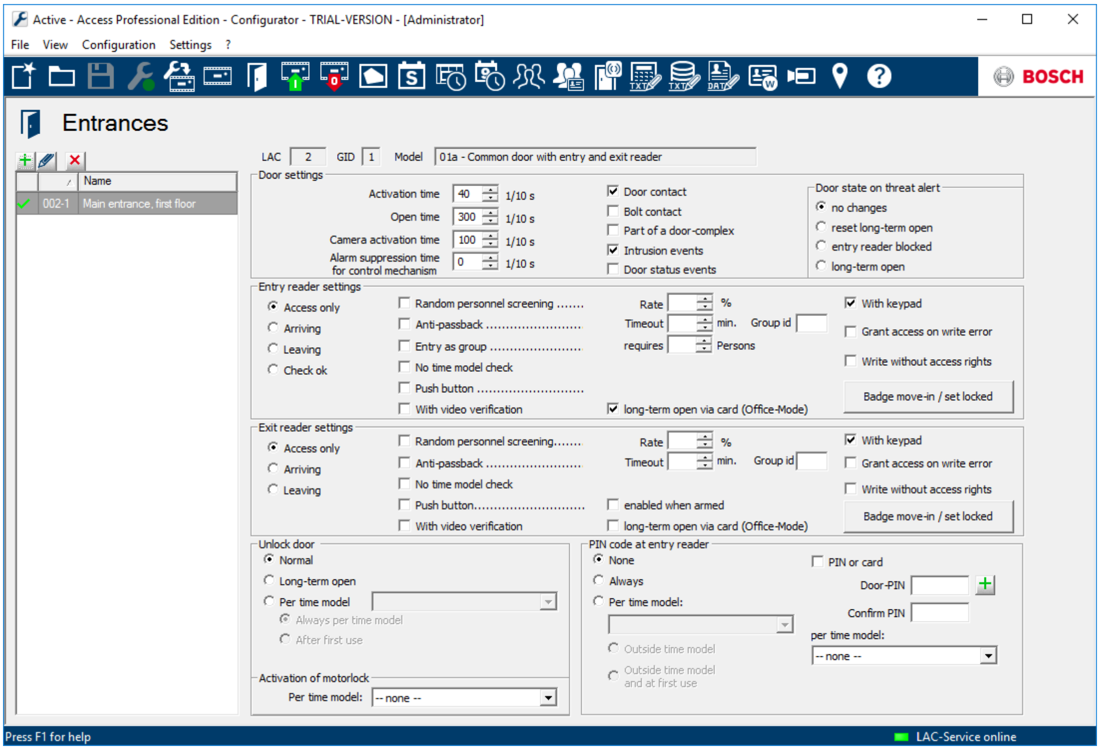
Warning!
In case that **OSDPv2 secure readers** are used in secure mode, the readers require the initial master key.
If the master key is lost readers cannot be reconfigured to a new master key!

If this key should get lost all readers have to be reset to the delivery status by the Support!

Notice!
The use of OSDP readers was not evaluated by UL
Consequences

6.2 Display and parameterization

All those entrances known to the system are shown in a list on the left hand side. By clicking one of the listed entrances the data for that entrance will be shown in the parameter fields on the right.



Active - Access Professional Edition - Configurator - TRIAL-VERSION - [Administrator]

File View Configuration Settings ?

Entrances

		Name
✓	002-1	Main entrance, first floor

LAC 2 GID 1 Model 01a - Common door with entry and exit reader

Door settings

- Activation time 40 1/10 s
- Open time 300 1/10 s
- Camera activation time 100 1/10 s
- Alarm suppression time for control mechanism 0 1/10 s
- ☑ Door contact
- □ Bolt contact
- □ Part of a door-complex
- ☑ Intrusion events
- □ Door status events

Door state on threat alert

- ● no changes
- ○ reset long-term open
- ○ entry reader blocked
- ○ long-term open

Entry reader settings

- ● Access only
- ○ Arriving
- ○ Leaving
- ○ Check ok
- □ Random personnel screening .... Rate %
- □ Anti-passback .... Timeout min. Group id
- □ Entry as group .... requires Persons
- □ No time model check
- □ Push button ....
- □ With video verification
- ☑ long-term open via card (Office-Mode)
- ☑ With keypad
- □ Grant access on write error
- □ Write without access rights
- Badge move-in / set locked

Exit reader settings

- ● Access only
- ○ Arriving
- ○ Leaving
- □ Random personnel screening....... Rate %
- □ Anti-passback .... Timeout min. Group id
- □ No time model check
- □ Push button...........................
- □ With video verification
- □ enabled when armed
- □ long-term open via card (Office-Mode)
- ☑ With keypad
- □ Grant access on write error
- □ Write without access rights
- Badge move-in / set locked

Unlock door

- ● Normal
- ○ Long-term open
- ○ Per time model
  - ● Always per time model
  - ○ After first use

Activation of motorlock

Per time model: -- none --

PIN code at entry reader

- ● None
- ○ Always
- ○ Per time model:
  - ○ Outside time model
  - ○ Outside time model and at first use
- □ PIN or card
- Door-PIN
- Confirm PIN
- per time model: -- none --

Press F1 for help LAC-Service online

The following buttons are situated along the top of the list box:

Add an entrance

Modify an entrance.

Delete an entrance

The following connections are shown at the top of the parameter fields.

LAC Sequential number of the controller assigned to this entrance.

GID Group Number of this entrance with its door(s) and reader(s)

Model The door model and description.

These entries can be modified by clicking the ✎ button or double clicking on an entrance in the list.
The following **door parameters** can be set:

Door Parameter	**Description**
Activation time in 1/10 s	If no door frame contact has been configured then the door opener will be activated for the duration set here. Otherwise the activation of the door opener will cease as soon as the frame contact sense that the door is open. Default value = 40
Open time in 1/10 s	Maximum time for which the door may remain open before sending the signal "Door open too long" . Default value = 300
Camera activation time in 1/10 s	If the entrance is equipped with a CCTV camera then it will be activated for the duration set here. Default value = 100
Alarm suppression time for control mechanism in 1/10 s	Duration of alarm supression (shunt) before the door opener is activated. The alarm suppression time is only effective if the time set is greater than 0. Default value = 0
Door contact	If the door has a frame contact then this can be parametrized to facilitate monitoring the entry of a person. At the same time, the signal to activate the door opener is turned off if the door contact shows that the door is open. This signal is also used to control the **alarm suppression time**.
Bolt contact	If the door has a bolt contact sensor then this can be parameterized to show whether the door is really closed.
Part of a door-complex	This parameter indicates whether the door is part of a door-complex, e.g. a "mantrap" or airlock. In this case the signals for the door-complex can ensure that both doors are never open simultaneously. If only one door is defined as part of a door-complex then the synchronisation is not active.
Intrusion events	Here you can parameterize whether a signal should be sent in the event of unauthorized door opening. A prerequisite for this is the existence of a **door contact**.
Door status events	Provided the entrace has a **door contact** the system can be parameterized to signal every open/close event.
Door state on threat alert	Configuring door states for threat alert (see chapter *Configuring threat alerts*)

The following reader settings can be parameterized for an entrance:

Reader Settings **Entry and exit readers**	**Description**
Access only	Only general access events are created by the reader.
Arriving	When accessing through this card reader a **time and attendance (TA)** booking is made and the person is booked as being present.
Leaving	When passing through this card reader a **time and attendance (TA)** booking is made and the person is booked as being absent.
Bookings created by readers which are configured for time and attendance are recorded daily in a file in the directory C:\Bosch\Access Professional Edition\PE\Data\Export (default path). A file named **TA_<Current date YYYYMMDD>.dat** is created, which can be edited. Fields are separated by a semicolon and can thus be edited by 3rd party spreadsheet applications, for example. Each booking record contains the following data: Last name; First Name; Company; Personnelno.; Card no.; Additional fields 1-10 (if parametrized); Name of the entrance; Date (yyyymmdd); Time (hhmmss plus the letter "s" to indicate daylight-saving time); Direction of passage expressed numerically (1 = Arriving, 2 = Leaving); Direction as a text string (ENTER, LEAVE)	
Check OK	Only for **entry readers.** This parameter enables a reader to be set up as **release reader** to unblock the cards of personnel who have been selected for **random screening.** It is important to ensure that a release reader is not simultaneously configured to be a screening reader which randomly selects personnel for screening.
Random personnel screening - Rate-%	This parameter enables a reader to be set up as a **screening reader** to select cards randomly for **personnel screening.** As well as checking the box it is necessary to enter a percentage rate (1 to 99) for random screening. If no entry is made then all cards will be selected (100% screening). It is important to ensure that a screening reader is not simultaneously configured to be a release reader which unblocks cards blocked by screening readers.
Anti-passback - Timeout - Group ID	This option blocks a card for the specified timeout period from reentering where it has just entered, unless an exit has been recorded in the meantime. This is to prevent misuse of cards by passing them back across a turnstile. **Timeout** in minutes between 1 and 480. Several readers can be combined in a group. An anti-passback is valid for each reader with the same **group ID**. Possible values: 1 to 2 characters 0 - 9 and/or A - Z
Entry as group - required number of persons	Only for **entry readers**.

Reader Settings **Entry and exit readers**	**Description**
	This option grants entry only after a group consisting of at least this number of persons has presented their cards. Possible values 2-6.
With keypad	Check this box if the door reader possesses a keypad
No time model check	By default accesses are checked against time models. This behaviour can be circumvented by setting this parameter.
Motor move-in	This option should be activated when the reader has a card feeder.
Push button - always enabled	This parameter enables the recognition of a signal to open the door. This signal can come from a push button or from a telephone e.g. if no reader is available. **always enabled**: If normal settings are configured, the push button does not work when the security system is activated. This means that it is not possible to exit the monitored area. With this option the push button remains operational, even with an armed alarm system. If the push button is activated, this function includes an exit reader, too.
With video verification	Check this box if video verification shall be activated.
Long-term open via card (Office mode)	This option describes the suspension of access control at an entrance during office or business hours. The entrance remains unlocked for these hours, to allow unhindered public access (see chapter Office mode).

Notice!
Checks which go beyond the basic verification of authorizations and time models (e.g. access sequence checks, anti-passback checks, random screening) are carried out by the LAC subsystem process. To deliver this functionality the Access PE server must be running round-the-clock (24 x 7).

The **unlocking of the entrance** can be configured with the following parameters:

Door unlock type	**Description**
Normal	The door is locked and will be opened only if its reader is presented with a valid card.
Long-term	The door is open for a prolonged period, e.g. during daylight hours, or as long as the reception is continuously manned.
Per time model	The long-term unlocking of the door is linked to a time model in various ways: – **Always per time model:** The door is unlocked during defined duty periods.

Door unlock type	Description
	– **After first use:** After the first use within a duty period the door remains unlocked until the end of that period. – **Activation via dialog**: Long-term opening during a duty period is regulated by a special dialog-capable reader.
Activation of motor lock	This parameter specifies a time model to govern the activation of a motor lock at the entrance. (usually outside normal business hours).

PIN-Code entry at the reader can be parameterized as follows:

PIN-Code	Description
None	No PIN-Code necessary.
Always	PIN-Code always necessary.
Per time model	PIN-Code entry is dependent on the time model, as per one of the following variants: – **Outside regular hours**: Outside of time model periods PIN entry is necessary. – **Outside regular hours and at first use:** Outside of time model periods and the first time a person crosses the entrance PIN entry is necessary.
PIN or card	If the function is active, access can be obtained either by entering the door PIN or with a card.
Door-PIN	option to enter a door PIN – 4 to 8 figures (parameter setting – general system settings)
Verification	re-enter the door PIN
per time model	The option of alternative PIN entry can be restricted to certain days or times of day via a time model.

Notice!
The **Identification-** and **Door-PIN** variants cannot be used for door models with security system arming (DM 10 and 14).

Notice!
Group access configured at a reader with keyboard does not work together with PinOrCard functionality.

See also

- *Configuring threat alerts, page 99*

6.3 Office mode

The term Office mode describes the suspension of access control at an entrance during office or business hours. The entrance remains unlocked for these hours, to allow unhindered public access. Outside of these hours the normal mode applies, that is, access is granted only to persons who present valid credentials at the reader.
For Office mode to operate, the following requirements must be met:

- One or more entrances must be configured to allow extended unlocked periods.
- At least one keypad reader must be used at the entrance.
- One or more cardholders must be authorized to put the entrance in and out of office mode.
- Their cards must be valid and allow access to the entrance outside of office mode hours.

How to proceed:

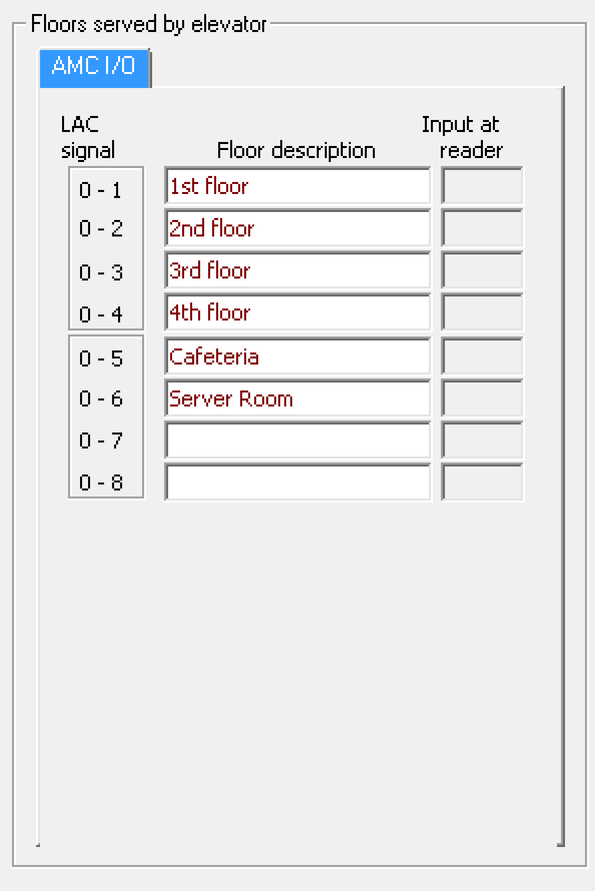
- Press 3 at the reader keypad.
- Present the card. The authorization of the person will be checked.
- If authorization is OK the door state will be changed to permanent open.
- The door state will toggle with each execution of the described steps.

Notice!
The option Office mode does not open a locked door.
If office mode is configured at a specific door, no time model must be configured for this door.

6.4 Door models with special settings

Door models with special settings
Some door models require special information for setup or special modes of use.

Door model 07: Elevator
If this door model is selected then the dialog is expanded by several fields to include the set up of floors.



LAC signal	Floor description	Input at reader
0 - 1	1st floor	
0 - 2	2nd floor	
0 - 3	3rd floor	
0 - 4	4th floor	
0 - 5	Cafeteria	
0 - 6	Server Room	
0 - 7		
0 - 8		

As a standard, one AMC2 can be used for 8 floors. It is possible to increase this number under the following preconditions:

- 64 floors when using Wiegand (AMC2 4W + AMC2 4W-EXT + 3 AMC2 16I-16O-EXT)
- 56 floors when using RS 485 (AMC2 4R4 + 3 AMC2 16I-16O-EXT)

These floors can be assigned as Access Authorizations.

Door model 14: Door with IDS rearming

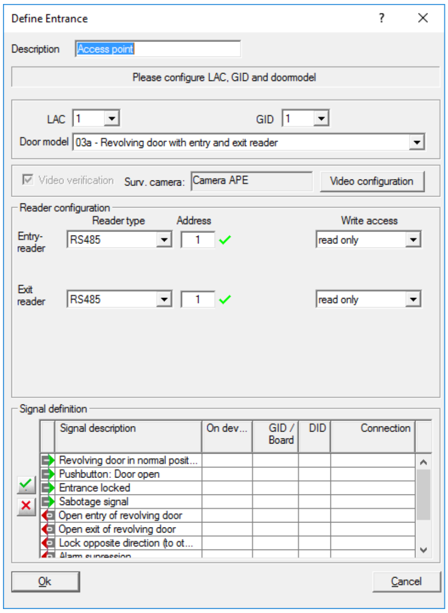
The configuration of this door model corresponds to that of all others, except that, along with access authorization for this entrance, authorization to arm and disarm the security system (IDS) itself is also assigned. These authorizations are typically assigned separately.

6.5 Assign video devices to an entrance

The entrance creation dialog also offers an option for setting up cameras for this entrance. To enable and set options for **Video verification**, you can make changes and configure other settings in a special dialog that you can open by pressing the **Video configuration** button. Proceed as follows:

- Activate the checkbox **Video verification** for the readers assigned to the entrance.
- Click ✎ or double-click the selected LAC under **Entrances.**

The following screen is displayed:



Define Entrance

Description: Access point

Please configure LAC, GID and doormodel

LAC: 1

GID: 1

Door model: 03a - Revolving door with entry and exit reader

☑ Video verification

Surv. camera: Camera APE

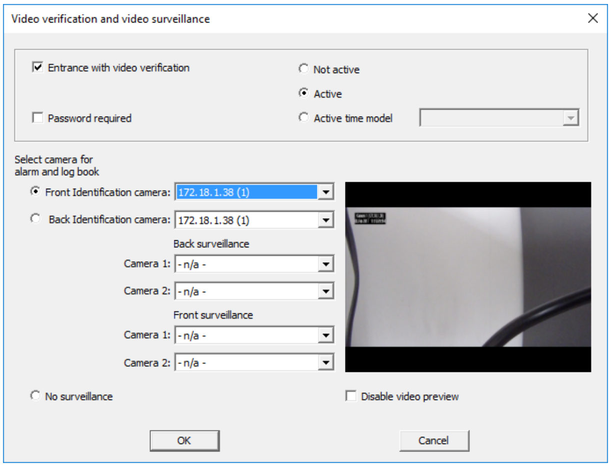
Reader configuration

	Reader type	Address	Write access
Entry-reader	RS485	1 ✓	read only
Exit reader	RS485	1 ✓	read only

Signal definition

Signal description	On dev...	GID / Board	DID	Connection
Revolving door in normal posit...				
Pushbutton: Door open				
Entrance locked				
Sabotage signal				
Open entry of revolving door				
Open exit of revolving door				
Lock opposite direction (to ot...				
Alarm supression				

Click the button **Video configuration** to start the Configuration screen:



Video verification and video surveillance

☑ Entrance with video verification

○ Not active

● Active

○ Active time model

□ Password required

Select camera for alarm and log book

● Front Identification camera: 172.18.1.38 (1)

○ Back Identification camera: 172.18.1.38 (1)

Back surveillance

Camera 1: - n/a -

Camera 2: - n/a -

Front surveillance

Camera 1: - n/a -

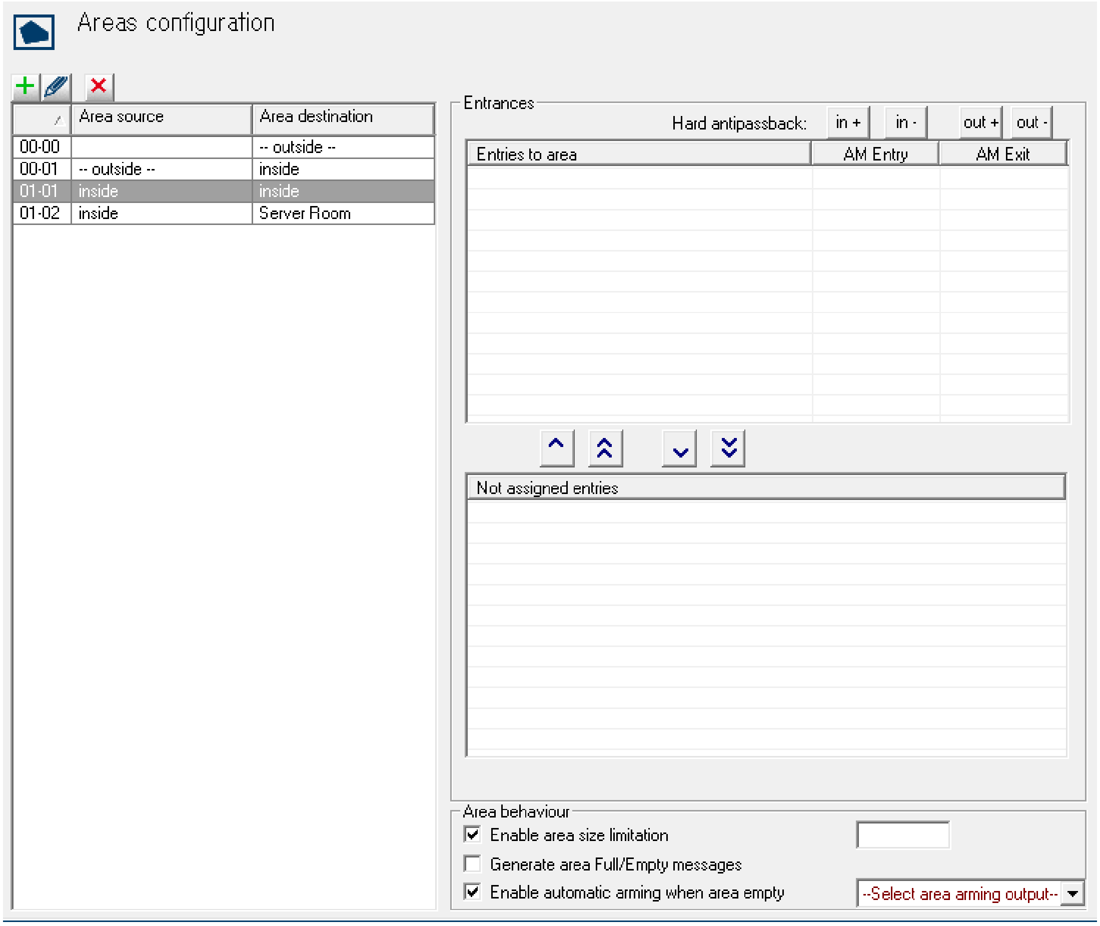
Camera 2: - n/a -

○ No surveillance

□ Disable video preview

7 Areas

The configuration of areas enables the system to locate persons and also to enforce a correct access sequence. In this way persons can be prevented from entering particular area by an unauthorized route. In general this function is used only for high security installations.



	Area source	Area destination
00-00		-- outside --
00-01	-- outside --	inside
01-01	inside	inside
01-02	inside	Server Room

☑ Enable area size limitation

□ Generate area Full/Empty messages

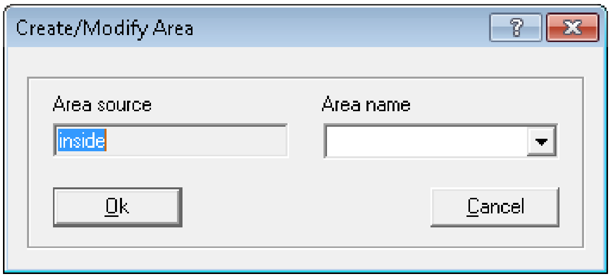
☑ Enable automatic arming when area empty --Select area arming output--

On the left hand side a list of already defined areas is displayed.
The following buttons are situated along the top of the list box:

➕	**Add** an area
✎	**Modify** an area
✕	**Delete** an area

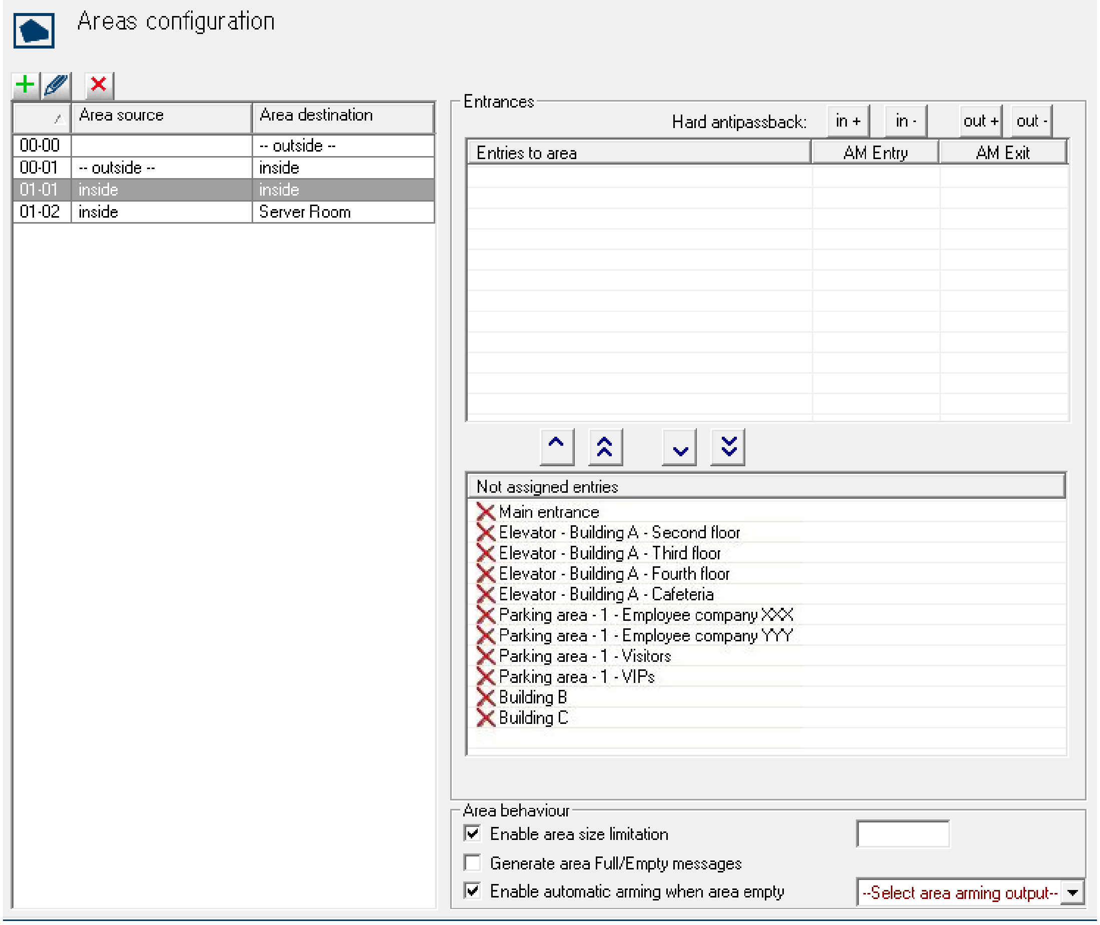
By default the installation process creates the area **--outside--**. No entrances can be defined for this area, because it denotes unmonitored territory.
From this pre-installed area you can now define further areas. These are purely virtual constructs and need not correspond to real-world areas. The areas can consist of one or multiple buildings (e.g. Area Company ACME Inc.), or individual floors or even single rooms.

Notice!
The definition of a new area is always based on an existing area. The existing area selected in the list box automatically becomes the **area source** for the new area. This default can not be overridden, therefore it is important to select the correct **area source** in the list box when creating a new area.



Area source: inside
Area name:

The name of the new area can be selected from the combo-box or a new name entered manually.
Areas must be configured so that it is in fact possible to move from real source to real destination without gaps or missing entrances between.
Example:
From the predefined area **--outside--** a person passes through the main entrance to the area **Reception**; from there to builidings A, B or C. Hence the areas in Access PE must be configured so that **Reception** is the **area source** for buildings A, B and C.
After a new area was created at least one entrance must be assigned to it. It takes at least one entrance reader to enable entering the area. Two list boxes are provided on the right hand side of the dialog window for this purpose.



Areas configuration

	Area source	Area destination
00-00		-- outside --
00-01	-- outside --	inside
01-01	inside	inside
01-02	inside	Server Room

Entrances

Hard antipassback: in + in - out + out -

Entries to area	AM Entry	AM Exit

Not assigned entries
Main entrance
Elevator - Building A - Second floor
Elevator - Building A - Third floor
Elevator - Building A - Fourth floor
Elevator - Building A - Cafeteria
Parking area - 1 - Employee company XXX
Parking area - 1 - Employee company YYY
Parking area - 1 - Visitors
Parking area - 1 - VIPs
Building B
Building C

Area behaviour

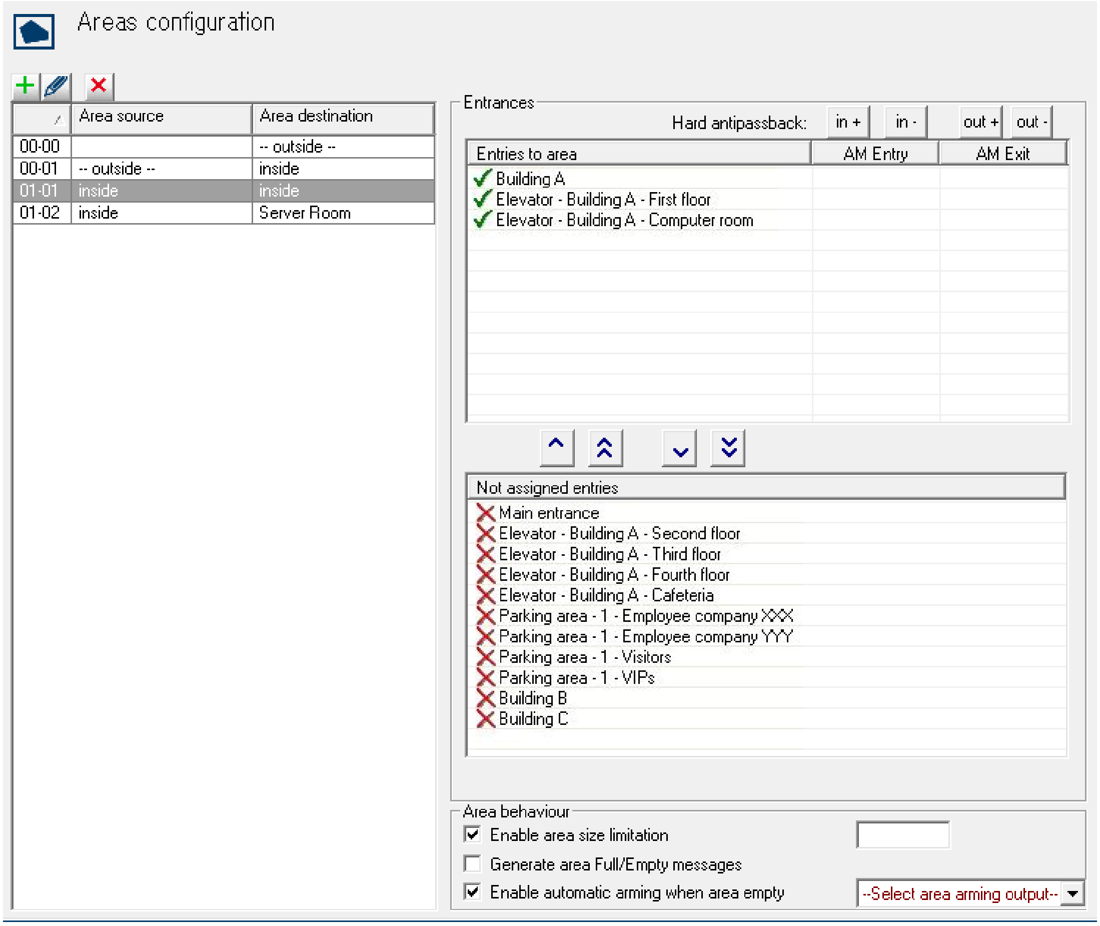
☑ Enable area size limitation

□ Generate area Full/Empty messages

☑ Enable automatic arming when area empty --Select area arming output--

The entrances in the **not assigned entrances** list are those available, i.e. those which have not yet been assigned to any area. By double clicking on the desired entrance, or on the ˄ button, that entrance is assigned to the area currently selected in the left hand list. The ⏫ button moves all the entrances in the lower list to the upper.

Conversely, double clicking in the upper list, or using the ˅ button undoes the assignment for the selected area. Klicking the ⏬ button undoes all assignments.



Areas configuration

	Area source	Area destination
00-00		-- outside --
00-01	-- outside --	inside
01-01	inside	inside
01-02	inside	Server Room

Entrances

Hard antipassback: in + in - out + out -

Entries to area	AM Entry	AM Exit
✓ Building A		
✓ Elevator - Building A - First floor		
✓ Elevator - Building A - Computer room		

Not assigned entries
✗ Main entrance
✗ Elevator - Building A - Second floor
✗ Elevator - Building A - Third floor
✗ Elevator - Building A - Fourth floor
✗ Elevator - Building A - Cafeteria
✗ Parking area - 1 - Employee company XXX
✗ Parking area - 1 - Employee company YYY
✗ Parking area - 1 - Visitors
✗ Parking area - 1 - VIPs
✗ Building B
✗ Building C

Area behaviour

☑ Enable area size limitation

□ Generate area Full/Empty messages

☑ Enable automatic arming when area empty --Select area arming output--

Notice!
An entrance can only be assigned to one area.
If you have already assigned certain entrances to an area then they will no longer be available in the **not assigned entrances** list.

The columns **AM Entry** and **AM Exit** refer to the Access Monitoring. If you wish to use your system for Access Monitoring then the entry and exit readers must be parameterized accordingly.

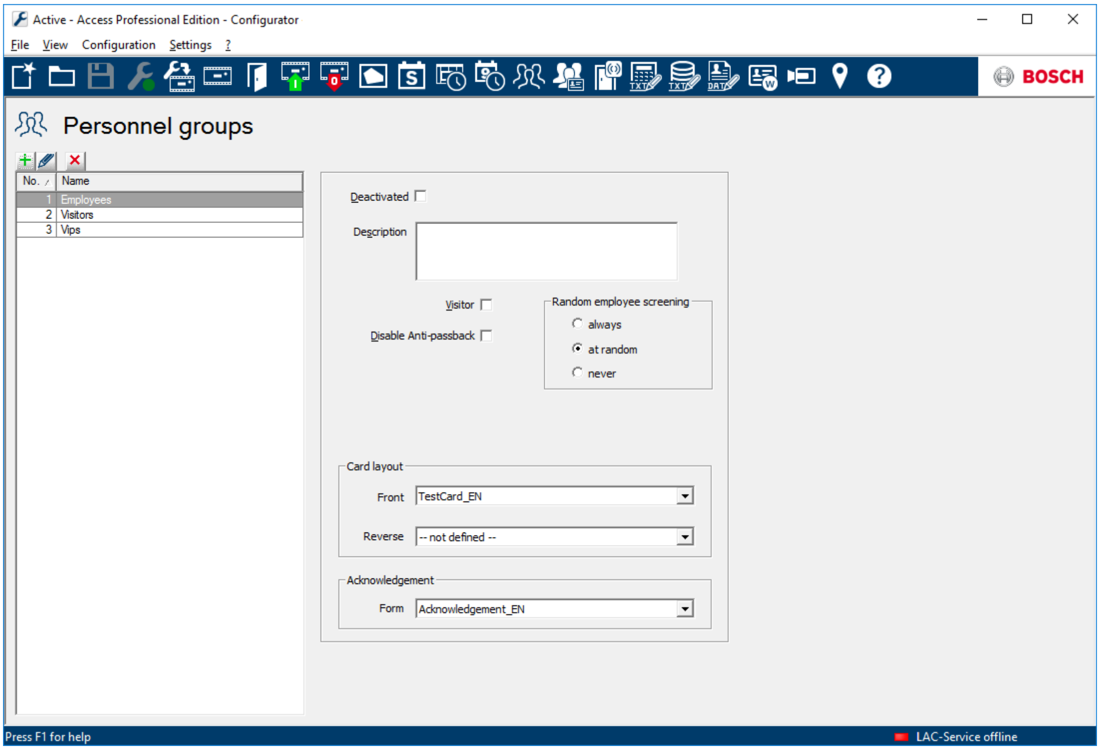
– Select the entrance you wish to parametrize in the E**ntries to area** list, and configure it as an entrance by clicking in +, or as an exit by clicking out +, to activate the Access Monitoring. The buttons in - and out - can be used to undo these configurations.

The same functions are available through context menus (right click on an entrance in the list).

Notice!
Checks which go beyond the basic verification of authorizations and time models (z.B. access sequence checks, anti-passback checks, random screening) are carried out by the LAC subsystem process. To deliver this functionality the Access PE server must be running round-the-clock (24 x 7).

8 Personnel Groups

Personnel groups allow a logical structuring of your company's staff. For example newly created persons in the system can inherit standard bundles of user rights from predefined personnel groups.


Active - Access Professional Edition - Configurator
File View Configuration Settings ?
BOSCH
Personnel groups

No.	Name
1	Employees
2	Visitors
3	Vips

Deactivated □

Description

Visitor □

Disable Anti-passback □

Random employee screening
○ always
● at random
○ never

Card layout
Front: TestCard_EN
Reverse: -- not defined --

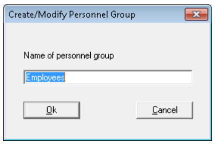
Acknowledgement
Form: Acknowledgement_EN

Press F1 for help
LAC-Service offline

The list of all previously defined personnel groups appears on the left hand side.
The following buttons are situated along the top of the list box:

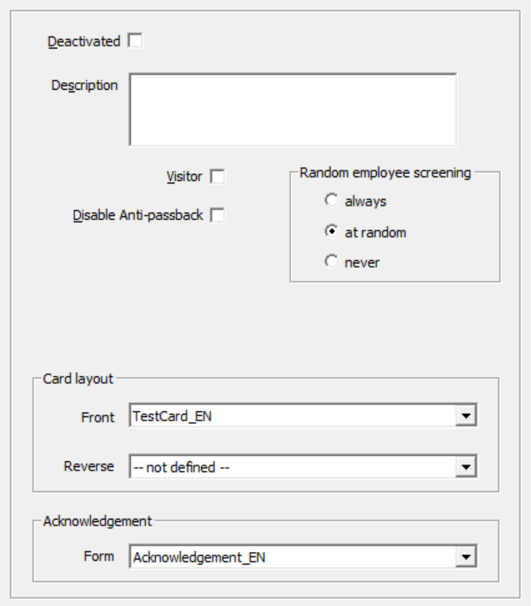
+	**Add** a new personnel group
✎	**Modify** the selected personnel group
✗	**Delete** the selected personnel group

Two personnel groups are predefined by default: **Employees** and **Visitors**. These groups correspond to the default filters in the **Personnel Management** application of Access PE.



Name of personnel group: Employees

Thus it is possible to differentiate between different types of employee (e.g. white-collar, blue-collar, cleaning staff), and assign to such personnel groups standard bundles of user-rights in the **Authorization groups** dialog. Whenever a new employee is assigned to a particular personnel group s/he then automatically receives the corresponding group rights.



Deactivated □

Description

Visitor □

Disable Anti-passback □

Random employee screening
○ always
● at random
○ never

Card layout
Front: TestCard_EN
Reverse: -- not defined --

Acknowledgement
Form: Acknowledgement_EN

The following parameters, on the right hand side of the dialog box, can be defined for the selected personnel group:

Settings	Description
Deactivated	Deactivation is a preparatory phase for deletion. No new persons can be added to the group, but the group continues to exist. **A personnel group should not be deleted until all members have been removed from it.**
Description	A detailed description can be stored for each personnel group.
Visitor	A group can be classified as being of type Visitor. The **Personnel Management** application is able to filter lists of persons based on the categories **All persons**, **Employees** and **Visitors**. Personnel groups of type **Visitor** can thus be viewed in isolation from groups of type **Employee**.
Disable Anti-passback	A certain group of persons (e.g. VIPs) can be excluded from the Anti-passback
Employee screening: always at random never	Applies only to readers which have been configured as screening readers for random personnel screening. The three options are defined as follows. = the percentage rate of screening is 100%

Settings	**Description**
	= this group is screened randomly at the defined percentage rate. = this group is never screened
Badge Layout Front Back	In order to create cards it is necessary to define at least one layout. Layouts can be defined per personnel group. A layout for the reverse side of the card is optional.
Acknowledgement **Form**	cards can, if so desired, be handed out conditionally upon receipt of a signature on a form. These forms can be designed to be personnel-group specific.

8.1 Group Access with Keyboard Readers

As described in the Configuration Browser online help, each card reader can be configured to grant access only after a certain number of authorized cards were presented at the reader. This feature is called "group access".

The group access procedure varies slightly depending on the type of card reader. Basically, keyboard readers allow more than the configured number of group members but require an extra key press to confirm that the group is complete.

Readers without keyboard:

- Present the exact configured number of authorized cards at the reader
- Access is granted

Readers with a keyboard (except IBPR):

- Present at least the configured number of authorized cards at the reader
- Optionally present more cards
- Press the Enter or "#" key at the reader
- Access is granted

IBPR readers with a keyboard:

- Present at least the configured number of authorized cards at the reader
- Optionally present more cards
- Press the "0" key at the reader
- Press the Enter or "#" key at the reader
- Access is granted

8.2 Restrictions for Group Access

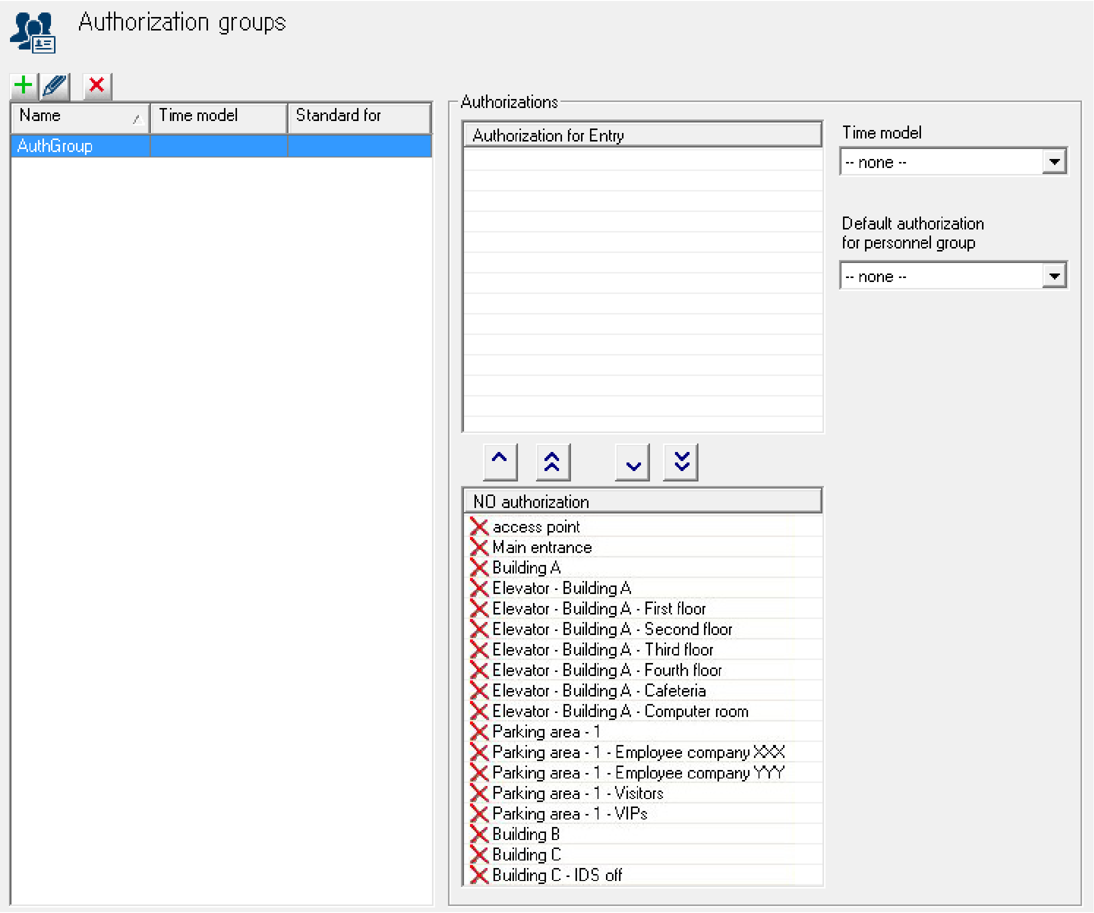
- Group Access can only be configured for the door models 1+3.
- Group access and persons area restriction can lead to more persons in the area than allowed, area counting is checked after the whole group has entered the area.
- Group access and several cards is working with counting cards, but possibly not the persons entering.
- Group access configured at a reader with keyboard does not work together with PinOrCard functionality (each configuration requires the same confirmation).

9 Access Authorizations

Access authorization groups simplify the administrative tasks of the system administrator and operator by grouping together any number of individual entrances that have similar access requirements (group of people, time restrictions etc.) or are close/next to each other in geographical terms. These groups can then be assigned to people in one step.

9.1 Create and assign

Authorization groups are logical groupings of entrances. The access rights of a person in the **Personnel Management** application can consist of one or more such authorization groups.



Authorization groups

Name	Time model	Standard for
AuthGroup		

Authorizations

Authorization for Entry

Time model: -- none --

Default authorization for personnel group: -- none --

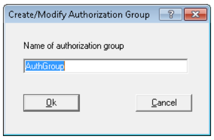
NO authorization

- ✖ access point
- ✖ Main entrance
- ✖ Building A
- ✖ Elevator - Building A
- ✖ Elevator - Building A - First floor
- ✖ Elevator - Building A - Second floor
- ✖ Elevator - Building A - Third floor
- ✖ Elevator - Building A - Fourth floor
- ✖ Elevator - Building A - Cafeteria
- ✖ Elevator - Building A - Computer room
- ✖ Parking area - 1
- ✖ Parking area - 1 - Employee company XXX
- ✖ Parking area - 1 - Employee company YYY
- ✖ Parking area - 1 - Visitors
- ✖ Parking area - 1 - VIPs
- ✖ Building B
- ✖ Building C
- ✖ Building C - IDS off

The list box on the left shows all hitherto defined authorization groups.
The following buttons are situated along the top of the list box:

✚	**Add** an authorization group
✎	**Modify** the selected authorization group.
✖	**Delete** the selected authorization group.

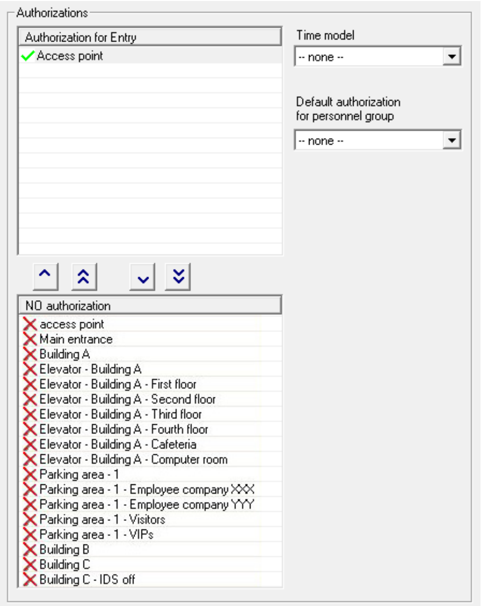
The ✚ button opens a dialog for naming a new authorization group



Create/Modify Authorization Group

Name of authorization group: AuthGroup

The right hand list boxes can be used to assign entrances to the selected authorization group.



Authorizations

Authorization for Entry

✓ Access point

Time model: -- none --

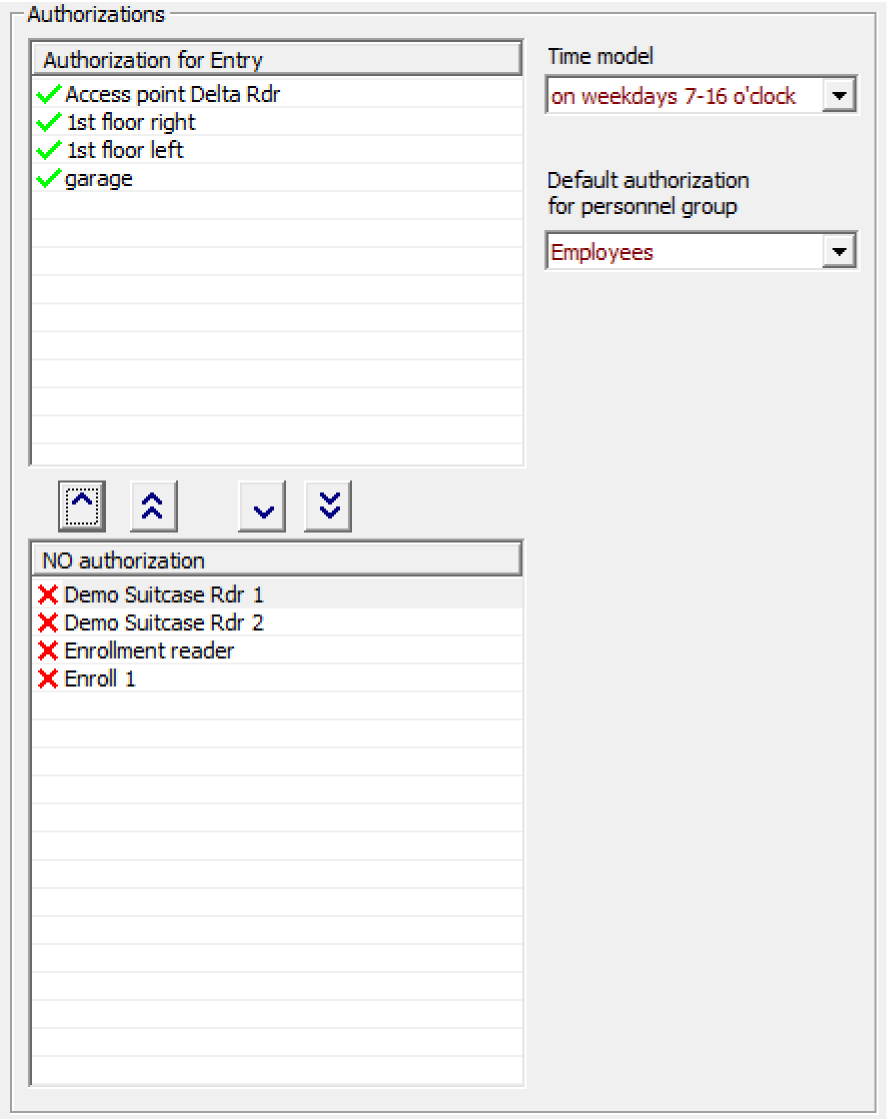
Default authorization for personnel group: -- none --

NO authorization

- ✗ access point
- ✗ Main entrance
- ✗ Building A
- ✗ Elevator - Building A
- ✗ Elevator - Building A - First floor
- ✗ Elevator - Building A - Second floor
- ✗ Elevator - Building A - Third floor
- ✗ Elevator - Building A - Fourth floor
- ✗ Elevator - Building A - Cafeteria
- ✗ Elevator - Building A - Computer room
- ✗ Parking area - 1
- ✗ Parking area - 1 - Employee company XXX
- ✗ Parking area - 1 - Employee company YYY
- ✗ Parking area - 1 - Visitors
- ✗ Parking area - 1 - VIPs
- ✗ Building B
- ✗ Building C
- ✗ Building C - IDS off

The entrances in the **NO authorization** list are those available, i.e. those which have not yet been assigned to any authorization group. By double clicking on the desired entry, or on the ⌃ button, the entrance is assigned to the authorization group currently selected in the left hand list. The ⏫ button moves all the entrances in the lower list to the upper. Conversely, double clicking in the upper list, or using the ⌄ or ⏬ buttons, undoes the assignment.

⚠ **Caution!**
Subsequent modifications in the assignments of entrances and time models affect the rights already assigned to persons.



Authorizations

Authorization for Entry
✓ Access point Delta Rdr
✓ 1st floor right
✓ 1st floor left
✓ garage

Time model: on weekdays 7-16 o'clock

Default authorization for personnel group: Employees

NO authorization
✗ Demo Suitcase Rdr 1
✗ Demo Suitcase Rdr 2
✗ Enrollment reader
✗ Enroll 1

Any authorization group can have a **time model** assigned to it which limits the user rights; see **Use of time models** (*Time models, page 75*) in Access PE.

Notice!
Mark the names of authorization groups which are dependent on time models e.g. with the prefix or suffix **DM**. This will help when assigning these groups in **Personnel Management** to distinguish them from unrestricted rights packages.

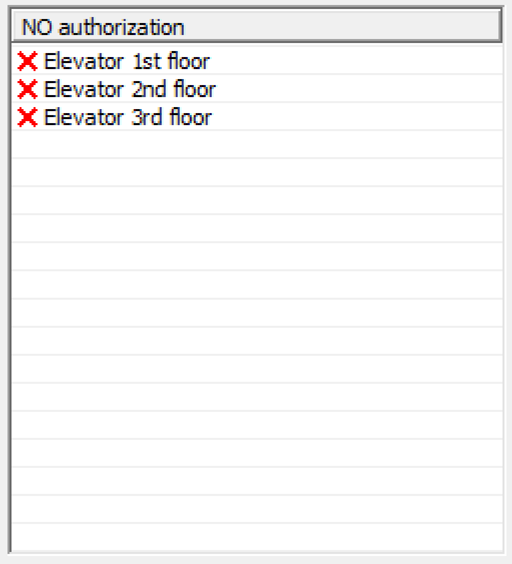
Additionally it is possible to assign the authorization group as the **default authorization** for a **personnel group** (e.g. employees or visitors). Thus when creating a new person in **Personnel Management** the correct authorizations will be assigned according to the person's personnel group.

9.2 Special rights

Door models 07 and 14 require additional information for their **configuration** (*Door models with special settings, page 54*). However they differ from other door models also in their assignment and usage.

Door model 07: Elevator

The list of available rights contains a separate element for the elevator, as well as for each floor.



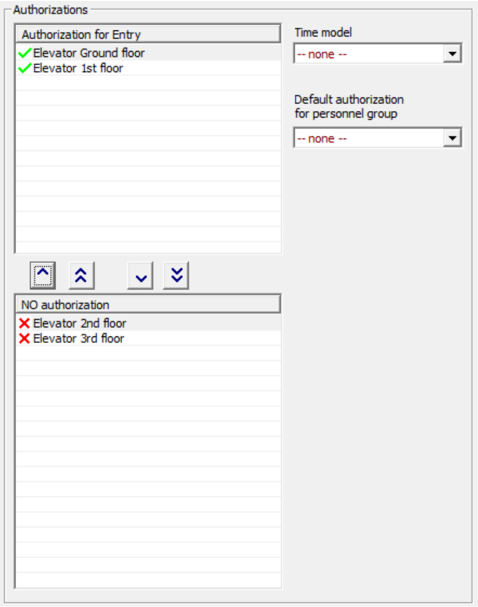
NO authorization

✗ Elevator 1st floor

✗ Elevator 2nd floor

✗ Elevator 3rd floor

When creating authorization groups, one reader for the **elevator** plus **at least one floor** must be assigned.



Authorizations

Authorization for Entry

✓ Elevator Ground floor

✓ Elevator 1st floor

Time model: -- none --

Default authorization for personnel group: -- none --

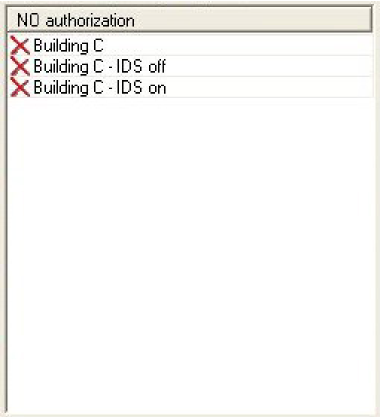
NO authorization

✗ Elevator 2nd floor

✗ Elevator 3rd floor

Door model 14: IDS-Rearming

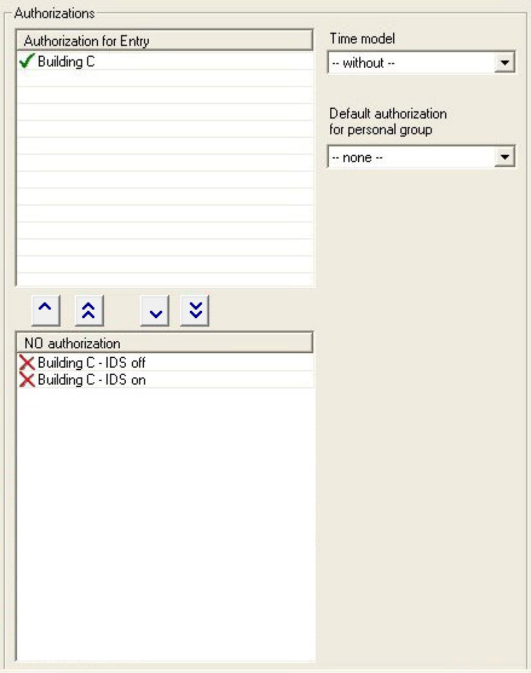
The list of available rights contains a separate element for the entrance and also one each for the arming and disarming of the system.



NO authorization
- ✗ Building C
- ✗ Building C - IDS off
- ✗ Building C - IDS on

These two kinds of rights are assigned separately from one another. If a cardholder has only access rights to a particular entrance then s/he cannot arm or disarm the IDS (intrusion detection system) from there.

Conversely, if a cardholder has only arm/disarm rights at a particular entrance, then s/he cannot pass through the entrance.



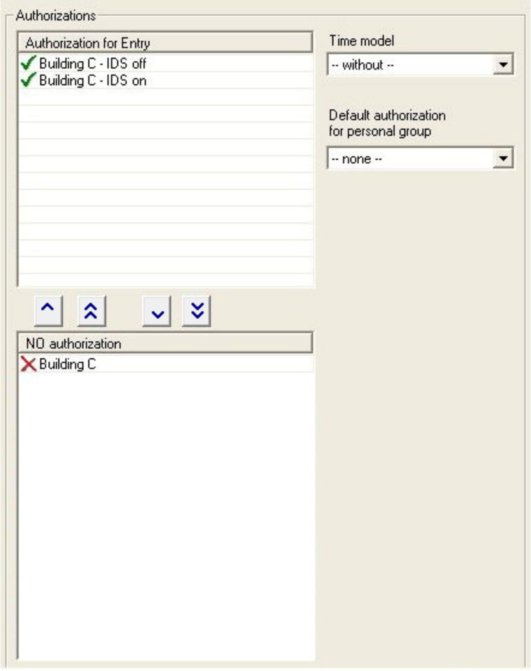
Authorizations

Authorization for Entry
- ✓ Building C

Time model: -- without --

Default authorization for personal group: -- none --

NO authorization
- ✗ Building C - IDS off
- ✗ Building C - IDS on



Authorizations

Authorization for Entry
✓ Building C - IDS off
✓ Building C - IDS on

Time model: -- without --

Default authorization for personal group: -- none --

NO authorization
✗ Building C

10 Special days

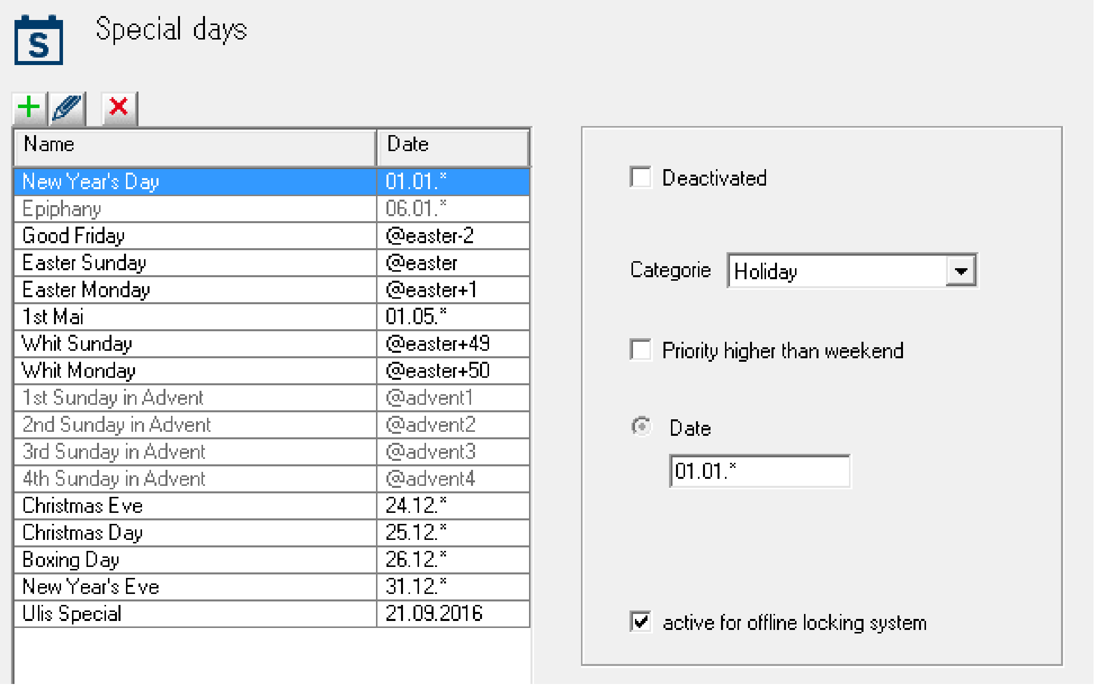
The special days defined in this dialog have different restrictions from the day of the week upon which they fall. The time models for the holidays and special days override those of the same day of the week in ordinary time.

The predefined list of special days can be changed, reduced or enlarged as desired. Holidays which are not required can be deactivated or deleted, in which case the time model for the normal day of the week takes precedence again. Non-existent or customer-specific days can be defined and added at will.

In this way it is possible to keep calendars small: Recurring special days are carried over from year to year, and only exceptions and irregular events need be defined specific to an individual year.

10.1 Create and modify

In Access PE a number of typical holidays are defined. These need to be altered, added to or deactivated depending on your location.



Special days

Name	Date
New Year's Day	01.01.*
Epiphany	06.01.*
Good Friday	@easter-2
Easter Sunday	@easter
Easter Monday	@easter+1
1st Mai	01.05.*
Whit Sunday	@easter+49
Whit Monday	@easter+50
1st Sunday in Advent	@advent1
2nd Sunday in Advent	@advent2
3rd Sunday in Advent	@advent3
4th Sunday in Advent	@advent4
Christmas Eve	24.12.*
Christmas Day	25.12.*
Boxing Day	26.12.*
New Year's Eve	31.12.*
Ulis Special	21.09.2016

☐ Deactivated

Categorie: Holiday

☐ Priority higher than weekend

● Date: 01.01.*

☑ active for offline locking system

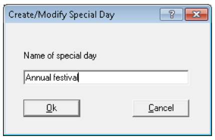
Notice!
The number of items for offline locking system is restricted to ##.

The following buttons are situated along the top of the list box:

+	**Create** a holiday/special day
✎	**Modify** a holiday/special day
✕	**Delete** a holiday/special day

Notice!
It is recommended that the predefined holidays and special days with **variable dates** (e.g. Easter) not be deleted but deactivated, if they are not to be used. Holidays and special days with variable dates can not be re-added later via the dialog.

If you use the + or the ✎ button to add or modify holidays, you will be prompted by as follows for a new name:



Create/Modify Special Day

Name of special day

Annual festival

By confirming with the OK button you will enter the new or modified name in the list. To the right of the list box the parameters for the selected list element can be defined.

Deactivated
Determines whether the holiday/special day is in use or not.

Category
You can divide active holidays/special days into 11 categories (holiday plus special day types 1..10), and can assign specific day models to each category when defining time models.

Priority higher than weekend
Specifies which option takes priority if an annually recurring holiday falls on a Saturday or Sunday. If the check-box is ticked then the duty model for the holiday takes precedence, otherwise the time model for the weekend.

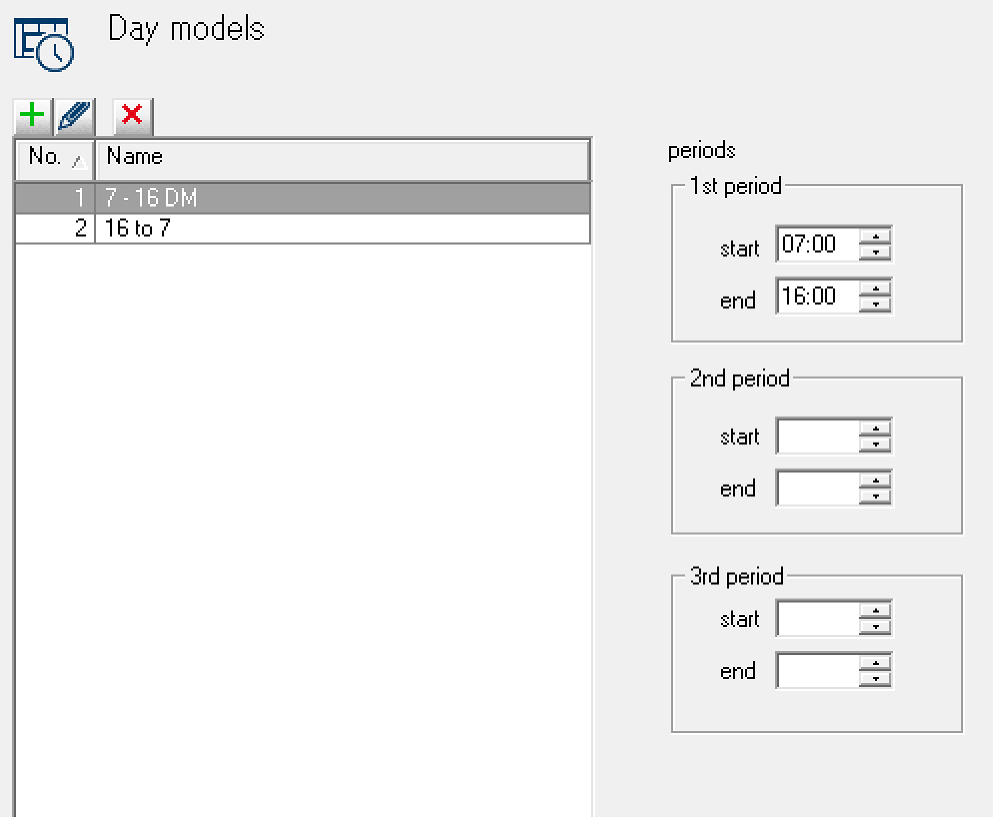
Date
If the special day recurs annually on the same date then an asterisk (*) should be used instead of entering an explicit year. Some holidays (e,g, Christmas) always have the same date.

11 Day models

Day models describe an abstract daily schedule. Irrespective of the day of the week a day model defines at which times of the day access should be granted or denied.
A separate day model is required for every different daily schedule.
A day model can consist of up to three periods with start and end times.
By using day models in time models the day models become associated with specific calendar days.

11.1 Create and modify

This dialog box is used for the creating and modifying day models which in turn are used in time models.



Day models

No.	Name
1	7 - 16 DM
2	16 to 7

periods

1st period
start 07:00
end 16:00

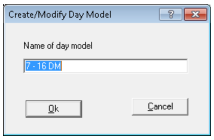
2nd period
start
end

3rd period
start
end

This list box on the left shows the day models defined hitherto.
The following buttons are situated along the top of the list box:

+	**Create** a day model
✎	**Modify** the selected day model
✕	**Delete** the selected day model

Use the + button to add, or the ✎ button to modify day models:



Create/Modify Day Model

Name of day model
7 - 16 DM

By confirming with the **OK** button you will enter the new or modified name in the list. To the right of the list box the periods which make up the selected day model can now be defined. A day model can consist of up to 3 periods.
The start of each subsequent period must be less than its end time. Hence if you wish to define a day model which spans midnight, then you need to define two periods:

1. The period from: ... to 24:00
2. The period from 00:00 to ...

12 Time models

Time models restrict access at the assigned entrances to specific times of day. This enables the system to deny access, for example, during the night, or to impose additional restrictions on access at weekends.
Access PE uses time models in several ways, for example in combination with:

- **Authorization groups**:

Time models can be associated with access rights so that these access rights apply only at particular times on particular days. It is equally and simultaneously possible to use access rights with no time limitations.

- **Persons**:

Time models assigned to persons restrict the general use of their cards to the defined dates and time periods.

- **Controllers and extension boards**:

The generation of input and output signals by controllers and extension boards can also be restricted by time models.

- **Doors**:

Door opening times can be governed by time models.

- **PIN codes**:

PIN code entry is an example of an additional security measure which can be imposed outside of the times defined by a time model.

- **Activation of a motor lock**:

A motor lock can be parameterized to be active only within a particular time model.

Depending on how they are to be used time models are created in different ways.
Example:
Supposing time models are to be used to restrict access of persons to weekdays 07:00 to 19:00 and weekends 09:00 to 15:00. Two day models are required:

1. with a period of 07:00 to 19:00
2. with a period of 09:00 to 15:00

If at the same time a motor lock is to be activated only outside of these times, then two day models for use by the lock's time model must be defined as follows:

1. with two periods of 00:00 to 07:00 and 19:00 to 24:00.
2. with two periods of 00:00 to 09:00 and 15:00 to 24:00.

The application of time models
Time models which are associated with personnel data will only be active if the reader's default settings have not been changed, and the option **No time model check** (*Display and parameterization, page 49*) thus remains unchecked.
Time models can be used in many ways, so in order to understand how the system handles multiple assignments please note the following conflict-resolution rules:

- If a person has access to certain entrances via a time model, and if that person is given access to the same entrances without a time model, then the **looser** restriction prevails. I.e. in this case the time model will not be applied.
  Example:
  A person is given the following access rights :
  - Access to entrances A, B, C and D within a time model of 09:00 to 17:00 every day.
  - Individual access rights to entrances B and D without time model.

This person now has access to entrances A and C between 09:00 and 17:00 every day, and unrestricted access to entrances B and D.

- If a person is given different access rights covering the same entrances, but governed by different time models, then the **union** of the time models is applied.
  Example:
  A person is given the following access rights:
  - Access to entrances A, B, C and D within a time model of 07:00 to 13:00 every day.
  - Access to entrances B, D, E and F within a time model of 09:00 to 17:00 every day.

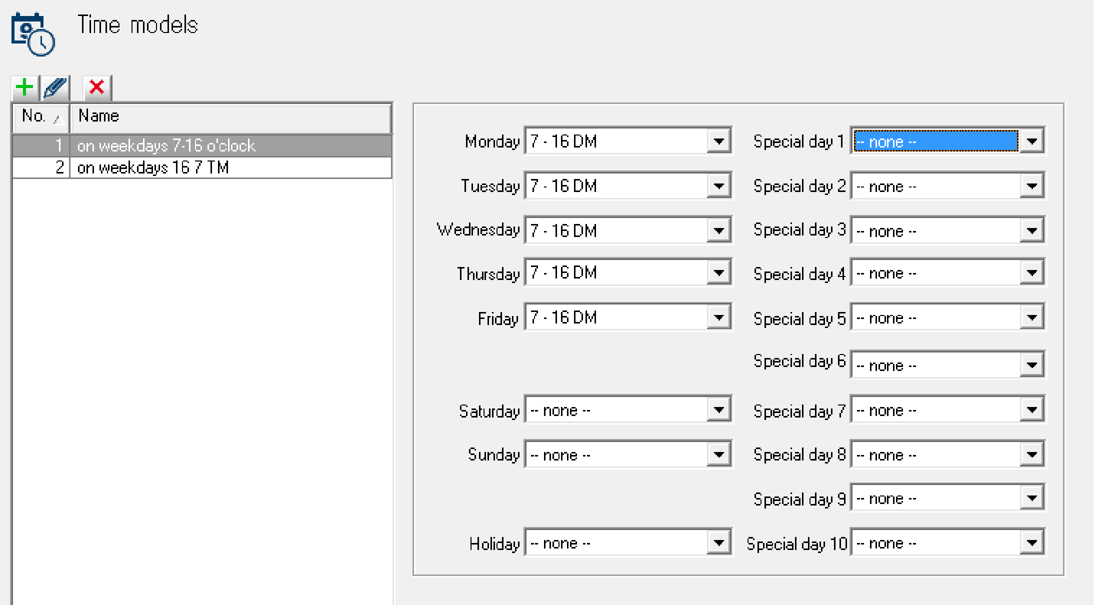
The person now has access to entrances A and C from 07:00 to 13:00, to entrances B and D from 07:00 to 17:00 and to entrances E and F from 09:00 to 17:00

- If a person is assigned to an authorization group with time models, and if the same person is given a time model for the use of his card, then the **intersection** of the defined periods is applied.
  Example:
  A person is given the following access rights:
  - An authorization group with access to entrances A, B, C and D, and a time model of 07:00 to 13:00 every day.
  - An authorization group with access to entrances B, D, E and F and a time model of 09:00 to 17:00 every day.
  - And additionally a duty model of 11:00 to 19:00 every day

The person now has access to entrances A and C from 11:00 to 13:00, and to entrances B, D, E, and F from 11:00 to 17:00.

12.1 Create and modify

This dialog box is used for the creating and modifying time models which, according to their usage activate certain system elements.



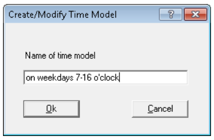
No.	Name
1	on weekdays 7-16 o'clock
2	on weekdays 16 7 TM

Monday: 7 - 16 DM
Tuesday: 7 - 16 DM
Wednesday: 7 - 16 DM
Thursday: 7 - 16 DM
Friday: 7 - 16 DM
Saturday: -- none --
Sunday: -- none --
Holiday: -- none --
Special day 1: -- none --
Special day 2: -- none --
Special day 3: -- none --
Special day 4: -- none --
Special day 5: -- none --
Special day 6: -- none --
Special day 7: -- none --
Special day 8: -- none --
Special day 9: -- none --
Special day 10: -- none --

This list box on the left shows the time models defined hitherto.
The following buttons are situated along the top of the list box:

✚	**Create** a time model
✎	**Modify** the selected time model
✕	**Delete** the selected time model

If you use the ✚ or the ✎ button to add or modify a time model, you will be prompted as follows for a new name:



Name of time model: on weekdays 7-16 o'clock

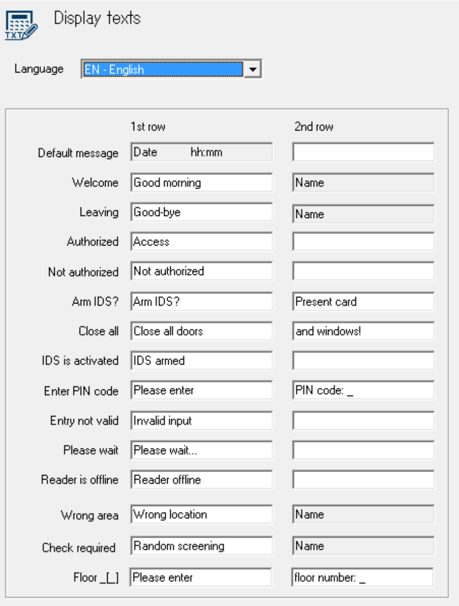
By confirming with the **OK** button you will enter the new or modified name in the list. To the right of the list box day models for the days of the week and for Holidays and Special Days (1..10) can now be assigned to the selected time model.
Time models are defined as repeating periods of one week. The course of each weekday is defined by assigning day models to them. Additionally the day models of these normal weekdays may be overridden by the day models of holidays or special days which happen to fall on those weekdays.

Notice!
If, when defining a time model, a particular weekday or special day is left without a day mode (i.e. left with the default setting **<none>**) then these days will be treated as if they had a day model without periods; i.e. on that day **no access** would be granted by the time model.

13 Texts

Each application language you selected during installation has its own list with display texts for display readers and log book messages. The texts in the relevant language list are used in the Logviewer, for example in the log book messages created when the application language is selected.

13.1 Displaytexts



Display texts

Language: EN - English

	1st row	2nd row
Default message	Date hh:mm	
Welcome	Good morning	Name
Leaving	Good-bye	Name
Authorized	Access	
Not authorized	Not authorized	
Arm IDS?	Arm IDS?	Present card
Close all	Close all doors	and windows!
IDS is activated	IDS armed	
Enter PIN code	Please enter	PIN code: _
Entry not valid	Invalid input	
Please wait	Please wait...	
Reader is offline	Reader offline	
Wrong area	Wrong location	Name
Check required	Random screening	Name
Floor _[_]	Please enter	floor number: _

Notice!
For “Floor” enter a single digit, if the number of floors is between 1 and 9. For 10 or more floors enter two digits.

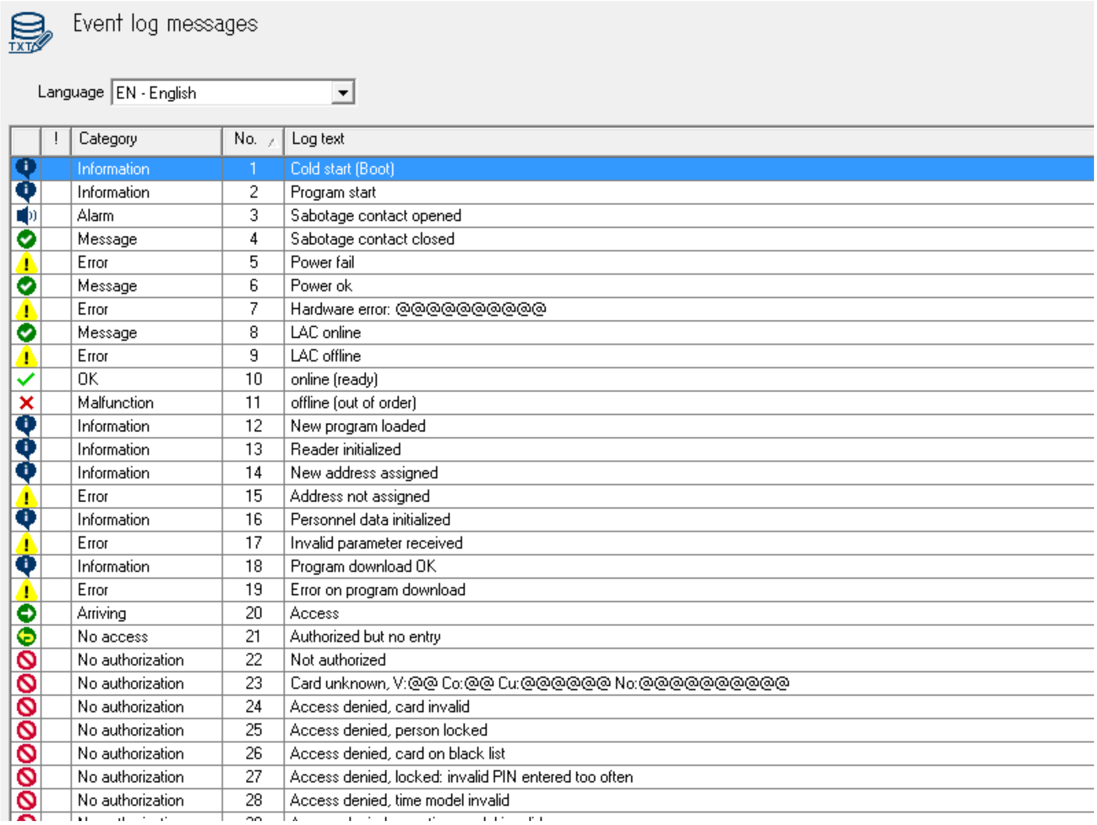
Some of those texts which are displayed at card readers can be modified in this dialog. The reader's display contains of two lines of 20 characters each.

Caution!
In the text for Enter PIN code the underscore "_” character should not be removed, as it triggers the reading of the PIN code.

The texts here are user-defined and not automatically translated by the application when switching languages. However by selecting a different language from the **Language** combo-box (above the list box) and re-entering the texts it is possible to define equivalents in every language variant installed in Access PE. Thus even these data can be viewed by a different user in his own language.

13.2 Event Log messages

In this dialog you can change not only texts of log messages, but also their categories.

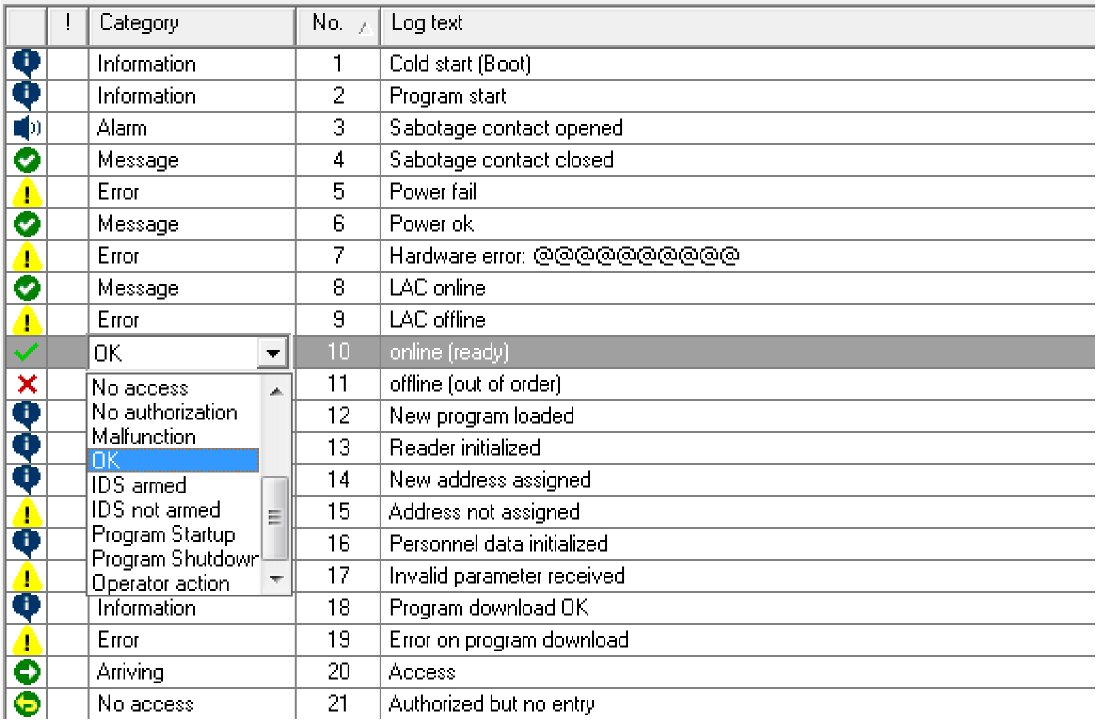


Event log messages

Language: EN - English

	!	Category	No.	Log text
ℹ		Information	1	Cold start (Boot)
ℹ		Information	2	Program start
🔊		Alarm	3	Sabotage contact opened
✅		Message	4	Sabotage contact closed
⚠		Error	5	Power fail
✅		Message	6	Power ok
⚠		Error	7	Hardware error: @@@@@@@@@@
✅		Message	8	LAC online
⚠		Error	9	LAC offline
✓		OK	10	online (ready)
✗		Malfunction	11	offline (out of order)
ℹ		Information	12	New program loaded
ℹ		Information	13	Reader initialized
ℹ		Information	14	New address assigned
⚠		Error	15	Address not assigned
ℹ		Information	16	Personnel data initialized
⚠		Error	17	Invalid parameter received
ℹ		Information	18	Program download OK
⚠		Error	19	Error on program download
➡		Arriving	20	Access
⬅		No access	21	Authorized but no entry
⛔		No authorization	22	Not authorized
⛔		No authorization	23	Card unknown, V:@@ Co:@@ Cu:@@@@@@ No:@@@@@@@@@@
⛔		No authorization	24	Access denied, card invalid
⛔		No authorization	25	Access denied, person locked
⛔		No authorization	26	Access denied, card on black list
⛔		No authorization	27	Access denied, locked: invalid PIN entered too often
⛔		No authorization	28	Access denied, time model invalid

The desired category can be chosen from a pull-down list which is invoked by double clicking in **Category** column in the line you wish to change.



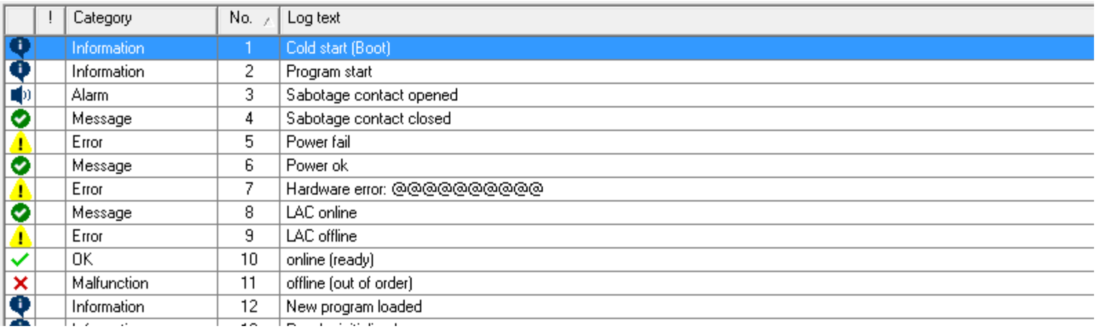
	!	Category	No.	Log text
ℹ		Information	1	Cold start (Boot)
ℹ		Information	2	Program start
🔊		Alarm	3	Sabotage contact opened
✅		Message	4	Sabotage contact closed
⚠		Error	5	Power fail
✅		Message	6	Power ok
⚠		Error	7	Hardware error: @@@@@@@@@@
✅		Message	8	LAC online
⚠		Error	9	LAC offline
✓		OK	10	online (ready)
✗			11	offline (out of order)
ℹ			12	New program loaded
ℹ			13	Reader initialized
ℹ			14	New address assigned
⚠			15	Address not assigned
ℹ			16	Personnel data initialized
⚠			17	Invalid parameter received
ℹ		Information	18	Program download OK
⚠		Error	19	Error on program download
➡		Arriving	20	Access
⬅		No access	21	Authorized but no entry

Each category is represented by a unique symbol in the first column. These symbols are also used to categorize incoming messages in the event log. The following symbols and categories can be used:

?	Event log unavailable
i	Information
✅	Message
⚠	Error
🔊	Alarm
➡	Arriving
⬅	Leaving
↩	No access
🚫	No authorization
✗	Malfunction
✓	OK
⊗	IDS armed
🌍	IDS not armed
🔑	Program startup
✗🔑	Program shutdown
🗀	Operator action

In the second column (headed by a **!**) select those messages which are to serve as special alarm messages in the **Alarm Management** dialog. Double-click in the corresponding cell to set or remove the alarm symbol 🔊. The installation procedure defines messages of categories **Alarm** and **Error** as alarm messages by default.

The desired text can be modified by double clicking **Log text** column in the line you wish to change.

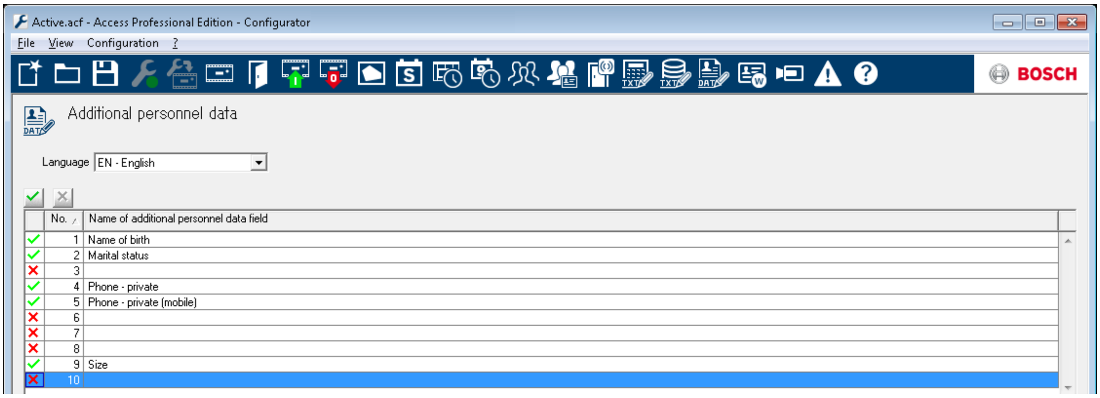


	!	Category	No.	Log text
i		Information	1	Cold start (Boot)
i		Information	2	Program start
🔊		Alarm	3	Sabotage contact opened
✅		Message	4	Sabotage contact closed
⚠		Error	5	Power fail
✅		Message	6	Power ok
⚠		Error	7	Hardware error: @@@@@@@@@
✅		Message	8	LAC online
⚠		Error	9	LAC offline
✓		OK	10	online (ready)
✗		Malfunction	11	offline (out of order)
i		Information	12	New program loaded

The texts here are user-defined and not automatically translated by the application when switching languages. However by selecting a different language from the **Language** combo-box (above the list box) and re-entering the texts it is possible to define equivalents in every language variant installed in Access PE. Thus even these data can be viewed by a different user in his own language.

14 Additional Personnel data

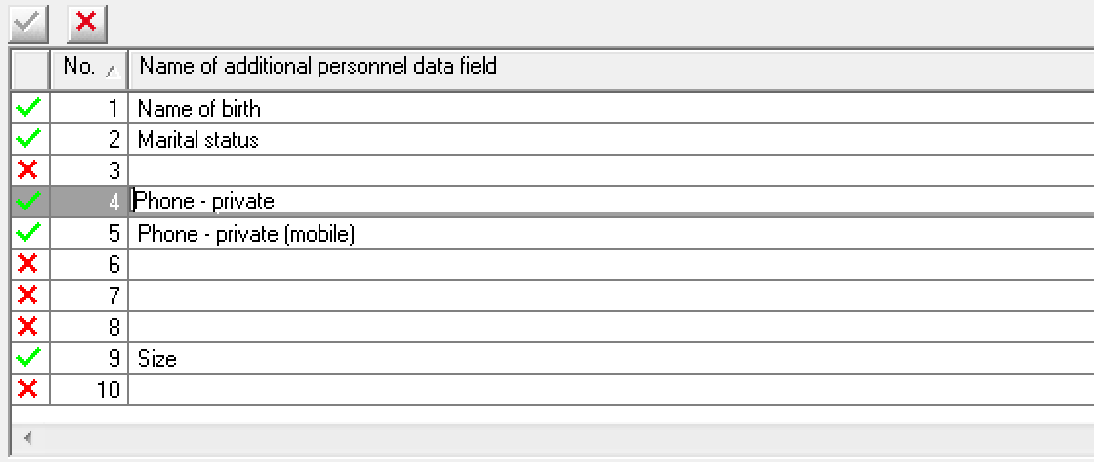
Ten freely definable extra fields are provided in addition to the default personnel data fields.


Active.acf - Access Professional Edition - Configurator
File View Configuration ?
BOSCH
Additional personnel data

Language EN - English

	No.	Name of additional personnel data field
✓	1	Name of birth
✓	2	Marital status
✗	3	
✓	4	Phone - private
✓	5	Phone - private (mobile)
✗	6	
✗	7	
✗	8	
✓	9	Size
✗	10	

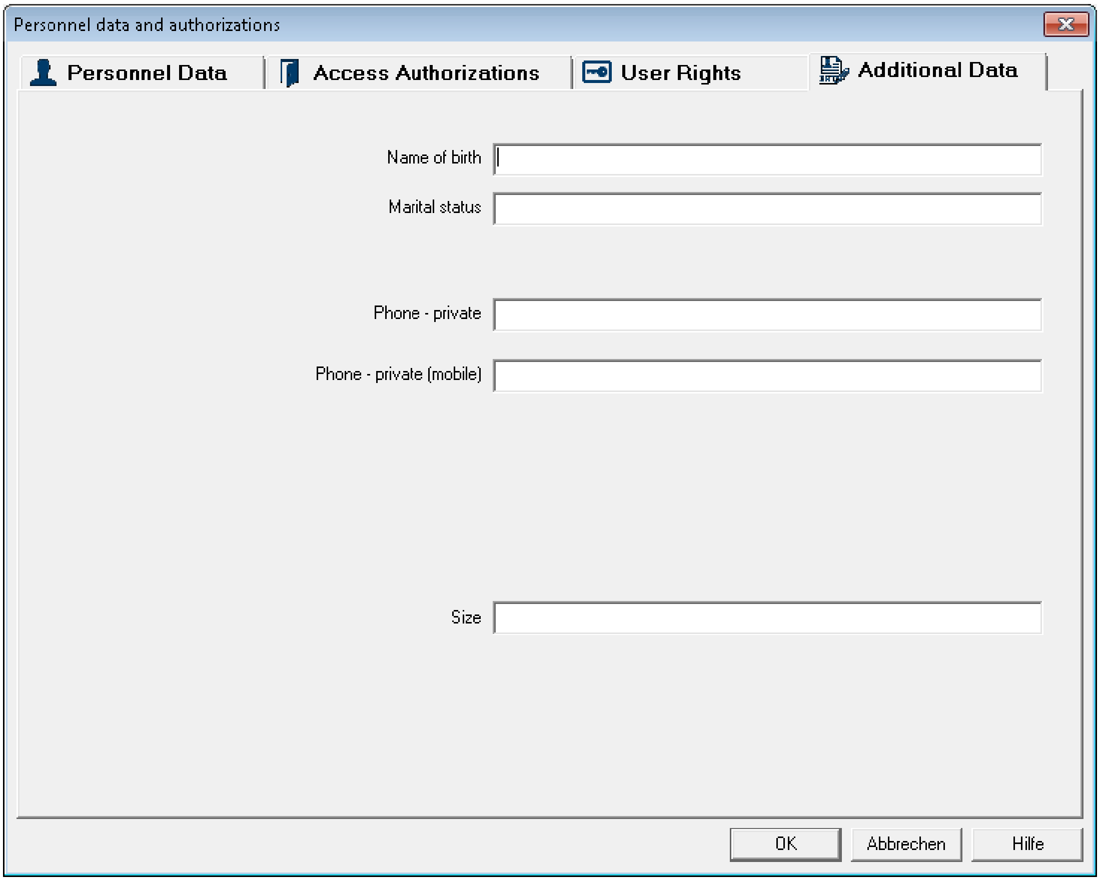
The list box already contains 10 lines for your use. By double clicking on a field in the column **Name of additional personnel data field** you render the field editable and can enter a name for it.



	No.	Name of additional personnel data field
✓	1	Name of birth
✓	2	Marital status
✗	3	
✓	4	Phone - private
✓	5	Phone - private (mobile)
✗	6	
✗	7	
✗	8	
✓	9	Size
✗	10	

Notice!
Entering a name does not activate the field for use. Activation is done by double clicking on the ✗ in the leftmost column, or clicking on the ✚ button. When the field is active the ✗ is replaced by a ✓.

When at least one additional data field has been defined then a new tab called **Additional data** appears in the Personnel Management application (personal data and authorizations dialog). The order of fields need not be maintained as gaps will be left for inactive fields.



Each field can contain up to 40 arbitrary characters.

Notice!
Each text entry field is assigned a field in the database so that the data can be stored, selected and included in reports. This means however that changes to additional data fields which are in use will lead to the loss from the database of the data they contain .

The names of additional data fields are user-defined and not automatically translated by the application when switching languages. By selecting a different language from the **Language** combo-box (above the list box) it is possible to define equivalents in every language variant installed in Access PE. Thus even these data can be viewed by a different user in his own language.

Activation/Deactivation of additional fields

As well as receiving a name additional data need to be activated. To do this double click the symbol in the leftmost column or click the ✚ button. The symbol is changed from ✗ to ✓.

The **Additional data** tab in the **Personnel Management** application will not appear until at least one additional data field has been activated.

Notice!
Fields without names can also be activated.

Activated fields can be deactivated by double clicking ✓ or by clicking ✗ . A security pop-up message is then displayed offering two variants of deactivation:

Notice!
Deactivation of fields deletes corresponding personnel data only if the field description is also deleted. Do you wish to delete the field description and thus the personnel data also?

No = Deactivate the field but keep its name and contents.

Yes = Deactivate the field and **delete its name and contents.**

15 Managing video devices

15.1 Opening the Configurator

There are three possible ways to open the Configurator:

Option 1

1. On your Desktop, double-click the Configurator icon BOSCH.
- The Configurator opens.

Option 2

1. Open the **Access PE Personnel Management** application.
2. In the menu bar of the **Access PE Personnel Management** application, click 🔧.
- The Configurator opens.

Option 3

1. Open the **Access PE Personnel Management** application.
2. In the menu bar, select **Tools**.
3. In the drop-down list, select **Execute Configurator**.
- The Configurator opens.

15.2 Finding video devices

Precondition:

- Install and configure all video devices.
- Open the Configurator.

1. In the menu bar of the Access Professional Edition Configurator, click 📹.
2. Click the **Browse new devices** button to search for video devices.
- During the search, the button name changes to **End searching** so that you can cancel the search.
- All video devices that are supported by the Bosch Video SDK will be detected and appear in the list field at the bottom right area of the Configurator dialog.

See also

- *Opening the Configurator, page 86*

15.3 Adding a video device to the access control system

1. Open the Configurator.
2. In the menu bar of the Access Professional Edition Configurator, click 📹.
3. Click the **Browse new devices** button to search for video devices.
- During the search, the button name changes to **End searching** so that you can cancel the search.
- All video devices that are supported by the Bosch Video SDK will be detected and appear in the list field at the bottom right area of the Configurator dialog.
- Once a video has been activated, the activation button will be disabled.
4. Select a video device from the list field at the bottom right area of the Configurator dialog.

5. Click the **Activate device** button.
- The selected video device moves to the list field on the left-hand side of the Configurator dialog.

Notice!
You can only move devices that are marked with a green check mark. Make sure to first make password-protected list entries (marked with a red cross) accessible by pressing the **Change connection** data button.

Notice!
The number of devices that you can transfer may be restricted by the license.

See also
- *Opening the Configurator, page 86*

15.4 Changing connection data

Option 1

1. Open the Configurator.
2. In the menu bar of the Access Professional Edition Configurator, click 🎥.
3. Click the **Browse new devices** button to search for video devices.
- During the search, the button name changes to **End searching** so that you can cancel the search.
- All video devices that are supported by the Bosch Video SDK will be detected and appear in the list field at the bottom right area of the Configurator dialog.

4. Select a video device from the list field at the bottom right area of the Configurator dialog.
5. Click the **Change connection** data button.
- The dialog box called **Change connection parameters** opens.

6. Enter the user name and the password.
- Make sure that you are using an authorized user account.

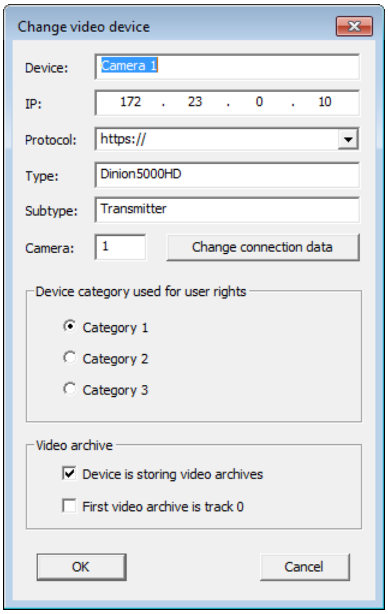
7. Click **OK**.

Option 2

1. Open the Configurator.
2. Double-click a video device in the list field on the left-hand side of the Configurator dialog.
- To help you identify the individual video devices, see the encoder device entries (No., Name, Address, Camera, Type).
- A dialog box called **Change video device** opens.

3. Click the **Change connection data** button.
4. Enter the user name and the password.
- Make sure that you are using an authorized user account.
- Note that you can only change the access data of the video device using its own software.

5. Click **OK**.



Change video device

Device: Camera 1

IP: 172 . 23 . 0 . 10

Protocol: https://

Type: Dinion5000HD

Subtype: Transmitter

Camera: 1

Device category used for user rights

● Category 1

○ Category 2

○ Category 3

Video archive

☑ Device is storing video archives

☐ First video archive is track 0

See also

– *Opening the Configurator, page 86*

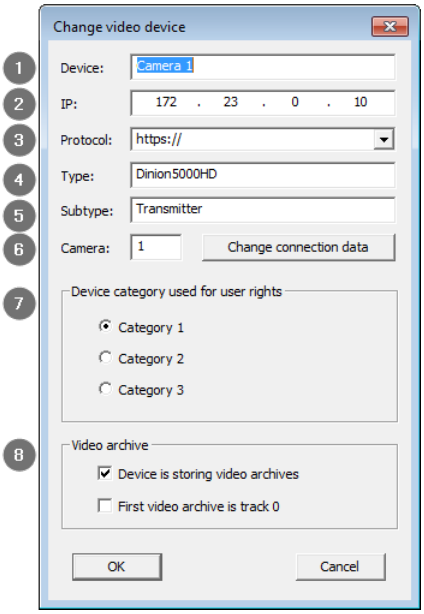
15.5 Changing video device data

1. Open the Configurator.
2. In the menu bar of the Access Professional Edition Configurator, click .
3. To open the **Change video device** dialog box:

– Double-click a video device in the list field on the left-hand side of the Configurator dialog.

– Click the green plus icon above the list field on the left-hand side of the Configurator dialog.

4. Enter or change the video device data according to the possibilities below.
5. Click **OK**.



Change video device

Device: Camera 1

IP: 172 . 23 . 0 . 10

Protocol: https://

Type: Dinion5000HD

Subtype: Transmitter

Camera: 1

Device category used for user rights

● Category 1

○ Category 2

○ Category 3

Video archive

☑ Device is storing video archives

☐ First video archive is track 0

1	Enter or change the name of the video device.
2	Enter or change the IP address of the video device.
3	Video devices are connected through https protocol by default. If the selected video device does not support https protocol, select none, in the drop-down list.
4	Enter or change the video device type.
5	Enter or change the video device subtype.
6	Change connection data.
7	Assign one of three user right categories, so that only selected users can operate certain cameras.
8	Select or clear the check boxes depending on how you want the videos to be archived.

See also

- *Opening the Configurator, page 86*

15.6 Showing live video image

1. Open the Configurator.
2. In the menu bar of the Access Professional Edition Configurator, click 🎥.

- Select a video device from the list field on the left-hand side of the Configurator dialog.
- Click the **Show video** button.

See also

- *Opening the Configurator, page 86*

15.7 Showing archive recordings

1. Open the Configurator.
2. In the menu bar of the Access Professional Edition Configurator, click 🎥.
3. Select a video device from the list field on the left-hand side of the Configurator dialog.
4. Click the Show playback button.

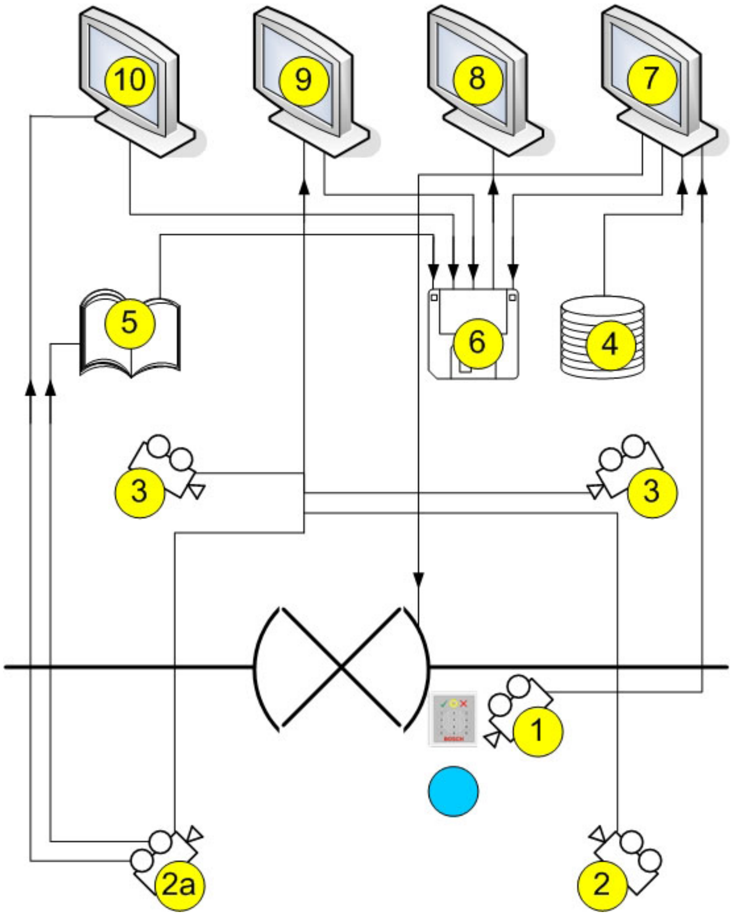
- A dialog box called Start playback opens.

5. Define the point in time at which you want to begin to see the recording.
6. Click **OK**.

See also

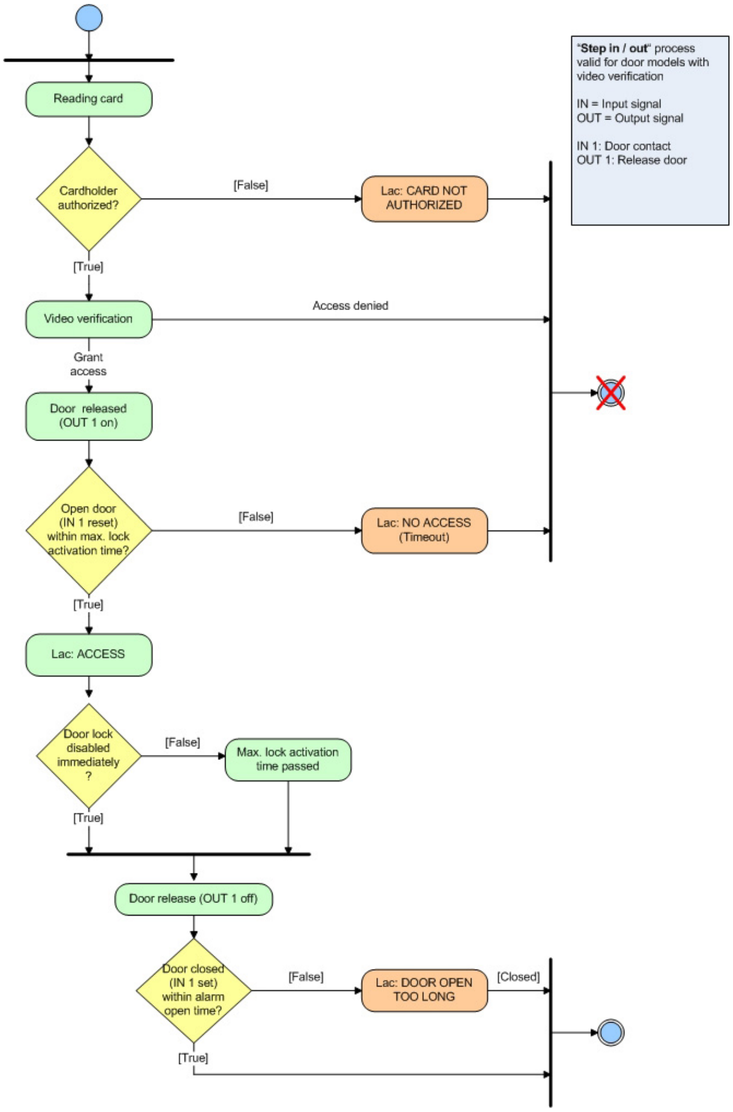
- *Opening the Configurator, page 86*

15.8 Displays and processes



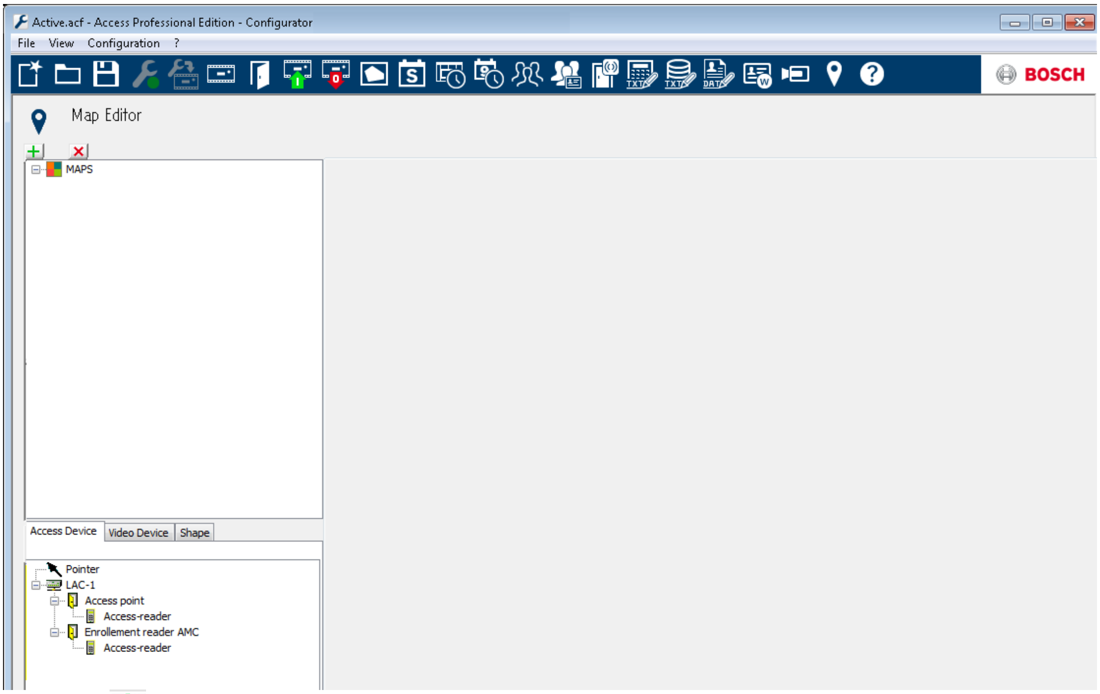
1 =	Identification camera The image from this camera is displayed in the Video verification dialog (7) when an access request is received.
2 =	Surveillance cameras - back area
2a =	Alarm and log book camera Choose one of the cameras 1, 2 or 3
3 =	Surveillance cameras - front area
4 =	Database In video verification (7), a database image is placed opposite the live image from the identification camera (1) for comparison.
5 =	Log book If you have configured an alarm and log book camera (2a), alarm-related images will be saved.
6 =	Local hard disk/storage media Local files can be saved from the Video verification (7), Video panel (9) and Alarm Management (10) dialogs, as well as from the images of the log book messages (5). In the case of video recordings (.vxx format), these can be displayed with the Bosch Video Player (8).

7 =	Video verification – Image comparison between the live image from the identification camera (1) and a database image (4). – Door release/locking via a button in the dialog. – Local storage of displayed images (6).
8 =	Bosch Video Player Locally stored .vxx recordings (6) can be displayed with this dialog.
9 =	Video panel – You can display images from up to four cameras at the same time in this view. – Local recordings (6) are possible for each camera.
10 =	Alarm Management If an alarm and log book camera (2a) has been configured, you can also display video images for alarm messages from the relevant entrance. You can create local copies (6) of these images and display them via Video Player (8).

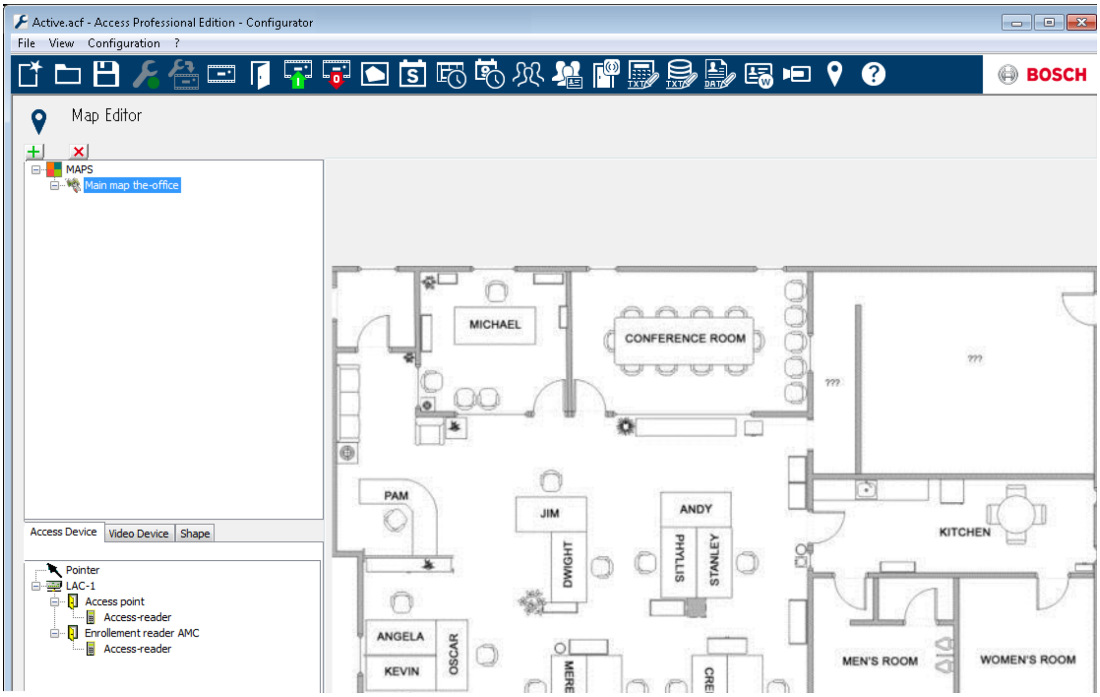


16 Configuring a map

Start the Map Editor



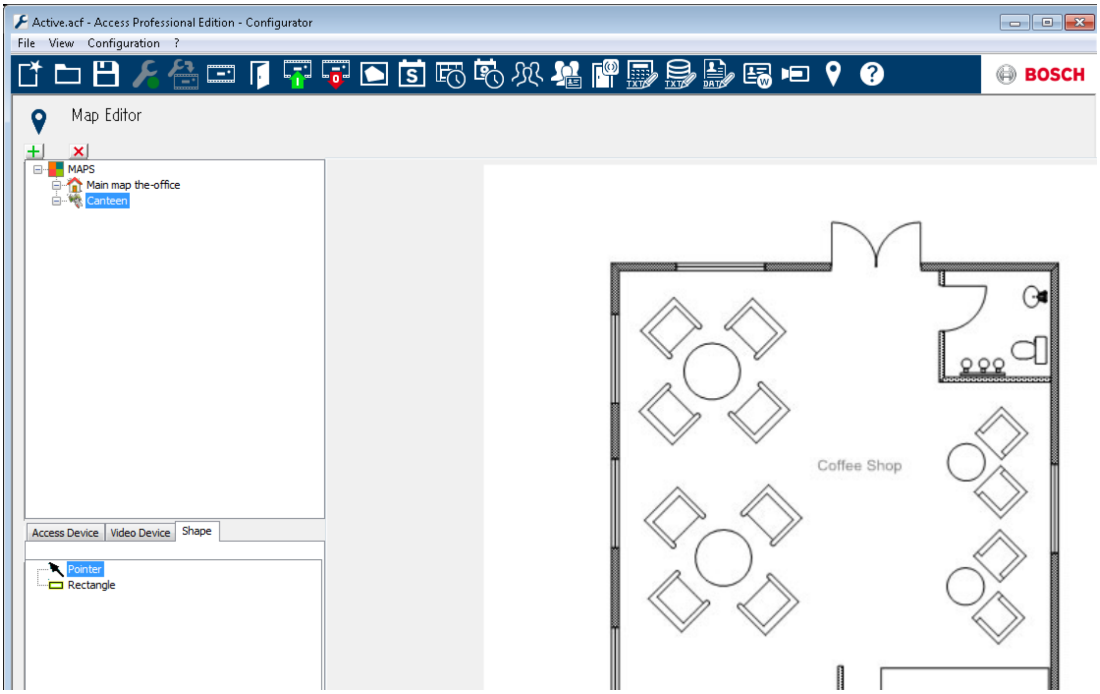
Klick the + button to add a map.



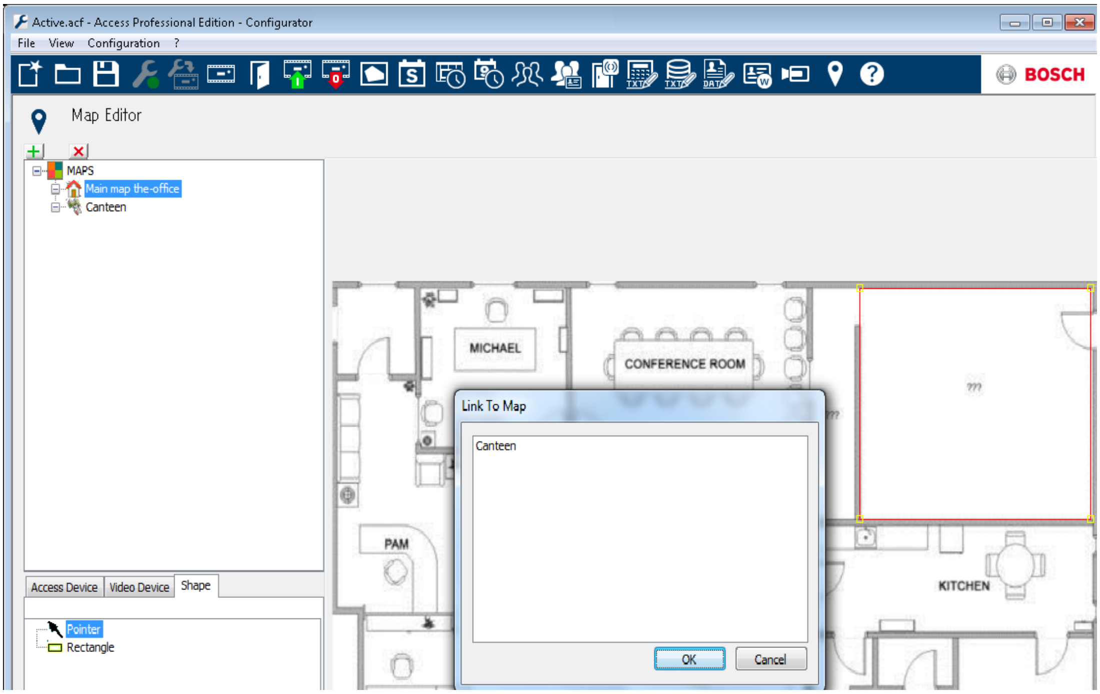
The map is shown on the dialog.

– Optionally configure this map as **Home Map**

Add a detail view, e.g. the canteen, to the map tree.



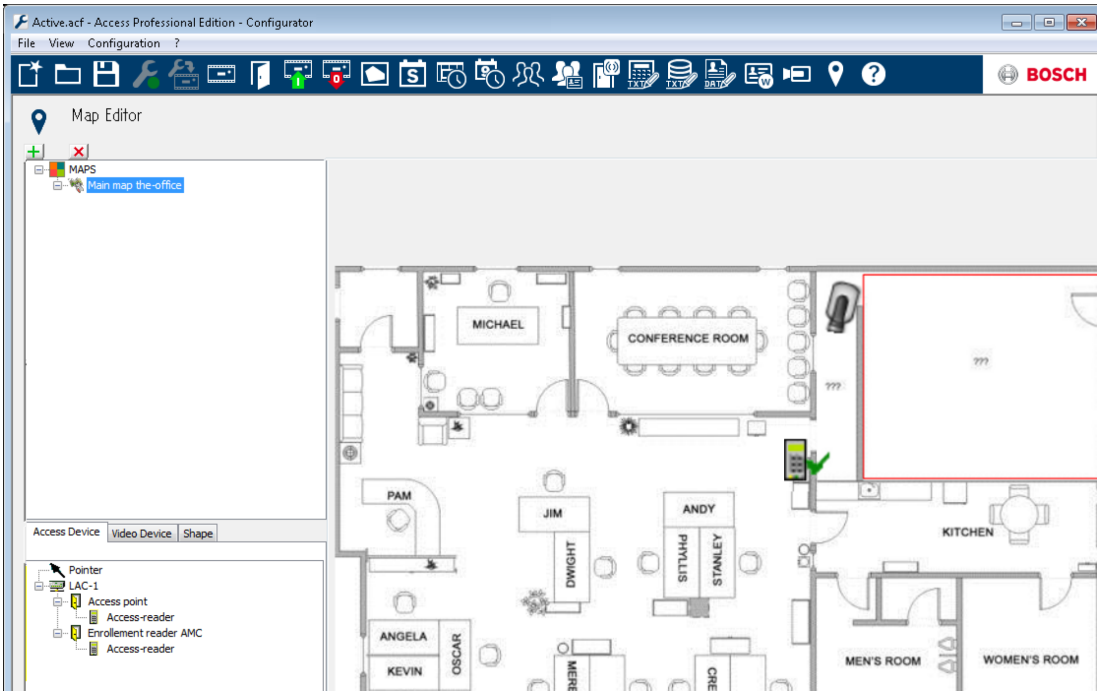
- To connect the new **Canteen map** with the main map, go to the **Shape Tab** and select a **Rectangle**.
- Place the rectangle over the area of the main map that should be shown as a detail view (shown as a red rectangle in the example below).
- In the **Link to Map** Display select the respective detail view, which is “Canteen” in this example.



17 Adding a device to a map

Select the **Device Tab** and add Devices to the map by pulling them with the mouse into the map. In the example below the following devices have been added:

- One Access point
- One Reader
- Two Cameras



- Click a device in the map and resize by holding the mouse button pressed,
- Click a device and rotate as required using the scroll wheel of your mouse.

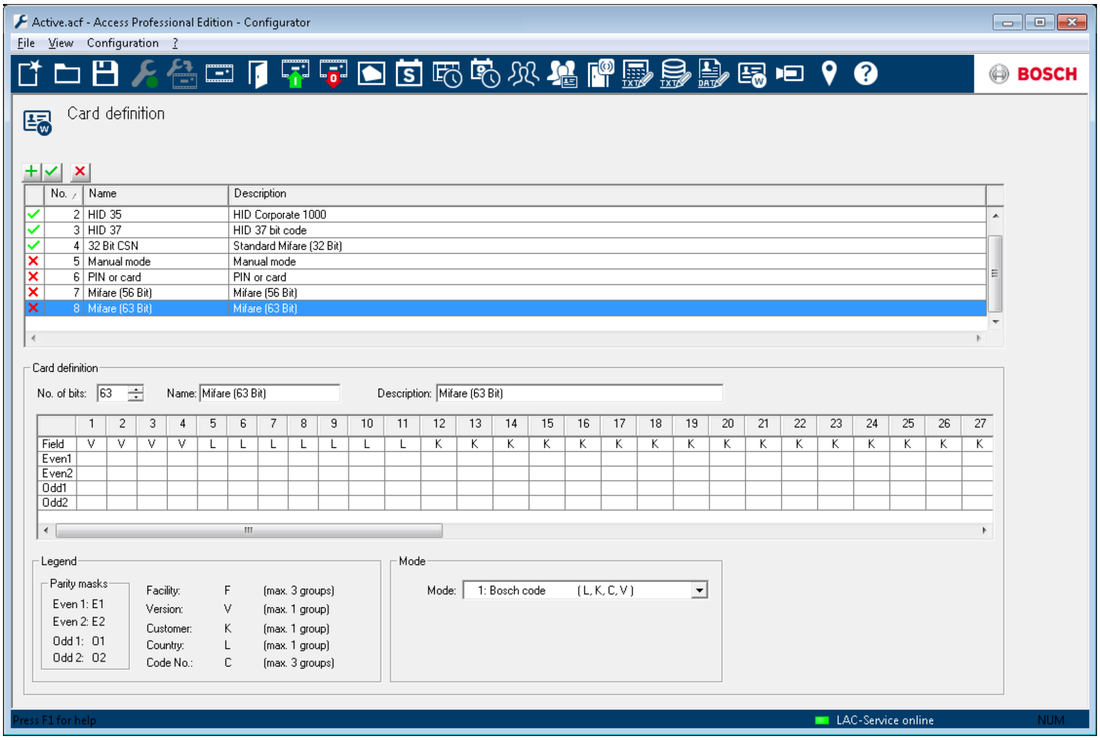
Device Types	Control elements
🚪	Door
▦	Reader
📹	Camera

Device Types	Alarms
Access Point (Entrance)	
🚪 🔒	Door opened without authorization
🚪 🔒	Door opened too long
	(All Reader alarm also reflect as Entrance Alarm*)
Reader	Reader error
▦ ✗	
Camera	N.A.

*) These alarm events can be customized by the user. That means, a user can configure any event as an alarm event using **AcConfig -> Event Log** message (Double click on second column will cause an alarm).

18 Card Definition

This dialog defines the data which the reader transmits, so that new card definitions can be entered into the system at a later date.


Active.acf - Access Professional Edition - Configurator
File View Configuration ?
BOSCH
Card definition
Press F1 for help
LAC-Service online
NUM

	No.	Name	Description
✓	2	HID 35	HID Corporate 1000
✓	3	HID 37	HID 37 bit code
✓	4	32 Bit CSN	Standard Mifare (32 Bit)
✗	5	Manual mode	Manual mode
✗	6	PIN or card	PIN or card
✗	7	Mifare (56 Bit)	Mifare (56 Bit)
✗	8	Mifare (63 Bit)	Mifare (63 Bit)

Card definition

No. of bits: 63 Name: Mifare (63 Bit) Description: Mifare (63 Bit)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Field	V	V	V	V	L	L	L	L	L	L	L	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
Even1																											
Even2																											
Odd1																											
Odd2																											

Legend

Parity masks
Even 1: E1
Even 2: E2
Odd 1: O1
Odd 2: O2

Facility:	F	(max. 3 groups)
Version:	V	(max. 1 group)
Customer:	K	(max. 1 group)
Country:	L	(max. 1 group)
Code No.:	C	(max. 3 groups)

Mode

Mode: 1: Bosch code (L, K, C, V)

The list control contains existing card definitions. Default system settings include six standard entries, of which the first four are active (have a green tick in the first column). Apart from the setting **Input Mode** all others are write-protected and can neither be modified or deleted.

Notice!
When using Wiegand controllers and readers, in order to use Identification-, arming- or door-PINs the Wiegand card definition **PIN or Card** (Nr. 6) needs to be activated.

Notice!
Make sure to have only 4 card types active, as the maximum number of valid card types is 4.

A new entry is initiated by clicking +. Depending on the manufacturer's information the **number of bits** and their encoding are selected and displayed.

Notice!
The maximum number of bits is limited to 64 for all definitions. The maximum number for any coding part (facility, version, customer, country and code number) is 32 bits.

A unique name and a description should be entered to distinguish the new card definition from others.

Entering a value in the **No. of bits** field changes the number of columns in the list box underneath accordingly. Five rows are displayed and the resulting matrix enables you to activate/deactivate individual bits as desired.
The interpretation of the code can now be specified by entering the following possible values in the cells of the **Field** row.

F	Facility: earmarks those bits for encoding the facility.	
V	Version: earmarks those bits for encoding the version variant.	
K	Earmarks those bits for encoding the customer.	
L	Land: earmarks those bits for encoding the country code.	
C	Code No.: earmarks those bits for encoding the card number.	
E1	Even 1: Cancelling bit for the first Even Parity Mask	Entering a value in one of these fields activates the check box for the corresponding row.
E2	Even 2: Cancelling bit for the second Even Parity Mask	
O1	Odd 1: Cancelling bit for the first Odd Parity Mask	
O2	Odd 2: Cancelling bit for the second Odd Parity Mask	
1 0	Bit values which make up the code itself	

When defining **Manual Mode** or creating any new example, you can specify the **Mode** that will determine how the code is to be read; e.g. if you select **PIN or card** mode, only the code number will be read i.e. only those parts marked **C**. You can choose from the following mode variants:

Serial number	Mode	Code parts checked
0	Facility + Code no.	F,C
1	Bosch Code	L,K,C,V
100	Manual	C
200	PIN or card	C

Explanation:
The "telegram" sent by a reader when presented with a card is a series of zeros and ones. For each card/reader type the length of the telegram (the number of bits) is precisely defined. A telegram of this kind contains, in addition to user data, control data to identify the telegram type and to verify correct data transfer. Correct data transfer is verified by parity bits which represent a checksum over selected bits in the mask, either a zero (even parity) or a one (odd parity). Controllers can be configured to calculate one or 2 checksums for even parities, and

one or two checksums for odd parities. In the list box you can mark, in those lines reserved for parity check sums (Even1, Even2, Odd1 and Odd2), which bits should be included in the checksum.
In the topmost line (Field) one bit is designated for each checksum used to balance out the checksum depending on its parity type. If a parity type (Even1, Even2, Odd1, Odd2) is not used then its row is simply left blank.

Activation/Deactivation of card definitions
The symbol in the first column of the list box reflects the activation status of each card definition.

✓	activated
✗	deactivated

The activation status can be toggled by double clicking on the symbol.
Safety checks warn about the consequences of deleting a card definition that is in use.

Notice!
Incorrect card encoding or a bad combination may lead to all cards become unreadable! Do you really wish to activate the selected card encoding?.

Notice!
All current cards using this encoding will become unreadable! Do you really wish to deactivate the selected card encoding?.

19 Configuring threat alerts

Introduction

A **Threat** is a critical situation that requires an immediate and simultaneous response from some or all entrances in an access control system.
A **Threat alert** is an alarm in response to a threat. Depending on their settings in the Access PE Configurator entrances can respond to threat alerts in different ways.
Suitably authorized persons can make a threat alert with a single action, for example through the Access PE user interface, by pushing a button or by presenting a special ID card to any reader.

Notice!
Always comply with local safety regulations concerning entrances in emergency situations Fail-safe mode is usually stipulated for entrances.

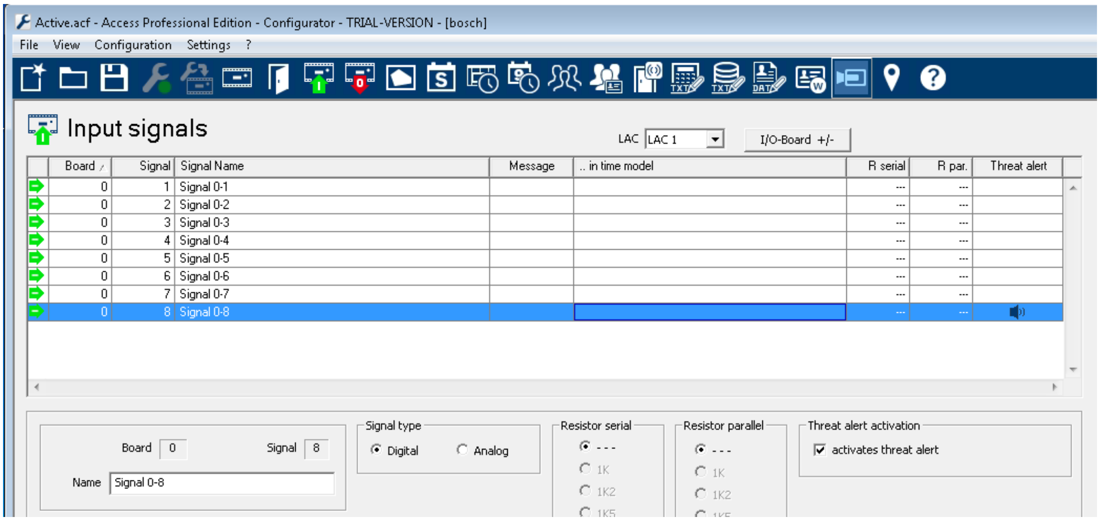
19.1 Configuring hardware for threat alerts

Overview

- Assign an AMC input signal for the propagation of threat alerts
- Define the response of individual entrances to the threat alert

Assigning an input signal for threat alerts

1. In the Access PE Configurator select **Input signals**.
2. In the line corresponding to the desired input signal, double-click in the **Threat alert** column or select the check box **activates threat alert**.
   A loudspeaker icon appears in the cell.


Active.acf - Access Professional Edition - Configurator - TRIAL-VERSION - [bosch]
File
View
Configuration
Settings
?
I/O-Board +/-

Input signals

LAC LAC 1

	Board	Signal	Signal Name	Message	.. in time model	R serial	R par.	Threat alert
➡	0	1	Signal 0-1			---	---	
➡	0	2	Signal 0-2			---	---	
➡	0	3	Signal 0-3			---	---	
➡	0	4	Signal 0-4			---	---	
➡	0	5	Signal 0-5			---	---	
➡	0	6	Signal 0-6			---	---	
➡	0	7	Signal 0-7			---	---	
➡	0	8	Signal 0-8			---	---	🔊

Board 0 Signal 8
Name Signal 0-8

Signal type
● Digital ○ Analog

Resistor serial
● - - -
○ 1K
○ 1K2
○ 1K5

Resistor parallel
● - - -
○ 1K
○ 1K2
○ 1K5

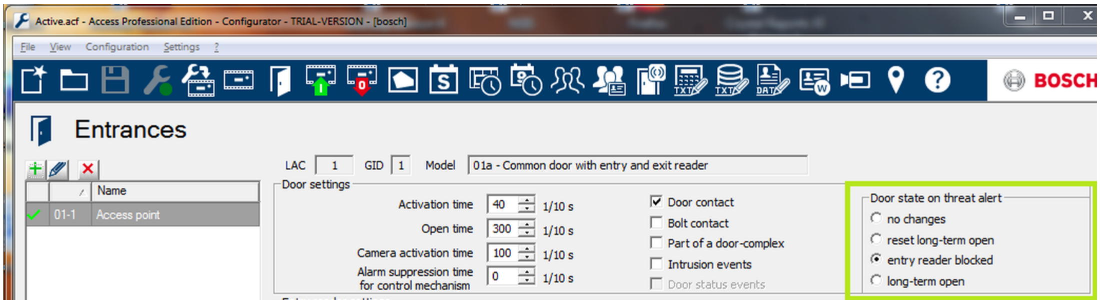
Threat alert activation
☑ activates threat alert

Defining the responses of entrances to a threat alert

1. In the Access PE Configurator select **Entrances**.
2. From the list of entrances select an entrance that is to respond to threat alerts
3. Set the parameter **Door state on threat alert** to one of the following:
   - **no changes**:The entrance must not change its state in response to the threat alert.

- **reset long-term open**: Any office-mode unlocked period is ended and the door resumes normal mode. That is, the door now unlocks only for valid credentials.
- **door blocked:** The door is locked and secured. Normal mode is suspended.
- **long-term open**: The door is unlocked and allows uncontrolled access.

4. Repeat this procedure for all entrances that are to respond to threat alerts.


Active.acf - Access Professional Edition - Configurator - TRIAL-VERSION - [bosch]
File View Configuration Settings ?
BOSCH
Entrances

		Name
✓	01-1	Access point

LAC 1 GID 1 Model 01a - Common door with entry and exit reader

Door settings

Activation time 40 1/10 s
Open time 300 1/10 s
Camera activation time 100 1/10 s
Alarm suppression time for control mechanism 0 1/10 s

☑ Door contact
☐ Bolt contact
☐ Part of a door-complex
☐ Intrusion events
☐ Door status events

Door state on threat alert
○ no changes
○ reset long-term open
● entry reader blocked
○ long-term open

Note that the effects of a threat alert persist until the threat alert is cancelled explicitly through the user interface of the access control system. See the online help for APE Personnel Management, section: **Using the Set/Deactivate Threat Alert buttons**.

Notice!
“Blocked“ (secured) doors
An entrance that has been explicitly set to state **door blocked** (secured) will remain secured when deactivating a threat alert through the **Deactivate Threat Alert** button. A secured state needs to be deactivated explicitly on the door, in order to avoid additional security breaches following threat alerts.
Dialog path:
Personnel Management main screen > **Device states** tree > right-click the secured entrance (marked with a padlock) for its context menu.

20 Appendix

20.1 Signals

A list of the available signals for inputs and outputs.

Input signals	**Description**
Door sensor	
Request to exit button	Button to open the door.
Bolt sensor	Is used for messages, only. There is no control function.
Entrance locked	Is used to lock the opposite door in sluices temporarily. But can also be used forpermanently locking.
Sabotage	Sabotage signal of an external controller.
Turnstile in normal position	Turnstile is closed.
Passage completed	A passage was completed successfully. This is a pulse of an external controller.
IDS: ready to arm	Will be set by the IDS, if all detectors are in rest and the IDS can be armed.
IDS: is armed	The IDS is armed.
IDS: request to arm button	Button to arm the IDS.
Local open enable	Will be used if a doorway arrangement opens the door without involving the AMC. The AMC sends no intrusion message but "door local open".

Output signals	**Description**
Door opener	
Sluice: lock opposite direction	Locks the other side of the sluice. Is set when the door opens.
Alarm suppression	... to the IDS. Is set as long as the door is open, to avoid that the IDS createsan intrusion message.
Indicator green	Indicator lamp - will be controlled as long as the door is open.
Door open too long	Pulse of three seconds. If the door is open too long.

Output signals	Description
Camera activation	Camera will be activated at the beginning of a passage.
Open turnstile inbound	
Open turnstile outbound	
Door is permanent open	Display that the door is permanent open.
IDS: arm	Pulse or permanent contact to arm the IDS.
IDS: disarm	Pulse to disarm the IDS.

20.2 Default Doormodels

Standard door models
The following door models are available by default:

01a	Normal door with entry and exit reader
01b	Normal door with entry reader and push button
01c	Normal door with entry reader
01r	One reader for the sole purpose of registering persons at an assembly point, for example in the case of an evacuation. No physical barrier is involved, and no signals will be created.
03b	Reversible turnstile with entry reader and push button
03c	Turnstile with entry reader
06c	Enrollment via AMC - no entrance control!
07a	Elevator with max. 16 floors
07b	Elevator with max. 16 floors
10a	Normal door with entry and exit reader and IDS rearming
10b	Normal door with entry reader, push button and IDS rearming
10c	Normal door with entry reader and IDS rearming
10d	Normal door with entry and exit reader and decentral IDS rearming
10e	Normal door with entry reader, push button and decentral IDS rearming
10f	Normal door with entry reader and decentral IDS rearming

14a Normal door with entry and exit reader and IDS rearming (arming authorization)

14b Normal door with entry reader, push button and IDS rearming (arming authorization)

14c Normal door with entry reader and IDS rearming

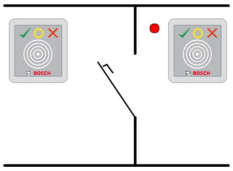
14d Normal door with entry and exit reader and decentral IDS rearming

14e Normal door with entry reader, push button and decentral IDS rearming

14f Normal door with entry reader and decentral IDS rearming

20.3 Doormodel 01

Normal door



Signals:

Input signals	**Output signals**
Door sensor	Door opener
Pushbutton: door open	Sluice: lock opposite direction
Bolt sensor	Alarm suppression
Entrance locked	Camera activation
Sabotage signal	Door open too long
Local open enable	

Model variants:

01a Normal door with entry and exit reader

01b Normal door with entry reader and push button

01c Normal door with entry reader

01r One reader for the sole purpose of registering persons at an assembly point, for example in the case of an evacuation. No physical barrier is involved in this door model, and no signals will be created.

Note:
Man-trap locking is only active if the door is parameterized as part of a man-trap.
If the door is not configured as part of a man-trap then input signal 03 is interpreted as a reader lock. In such a case if input signal 03 is set the reader will be locked.

Alarm suppression is only activated when the alarm suppression time before door opening is greater than 0.

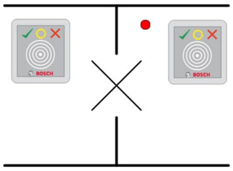
Optional secondary readers can be connected. In combination with a second door and man-trap locking it is possible to control both doors together as a man trap. This usage can also be advantageous for vehicle entrances, in which case a secondary reader for trucks and cars is also recommended.

Notice!

Singling function can be parametrized with DM 03, only.

20.4 Doormodel 03

Reversible turnstile



Signals:

Input signal	**Output signals**
Turnstile in normal position	Open turnstile inbound
Pushbutton: door open	Open turnstile outbound
Entrance locked	Sluice: lock opposite direction
Sabotage signal	Alarm suppression
	Camera activation
	Door open too long

Model variants:

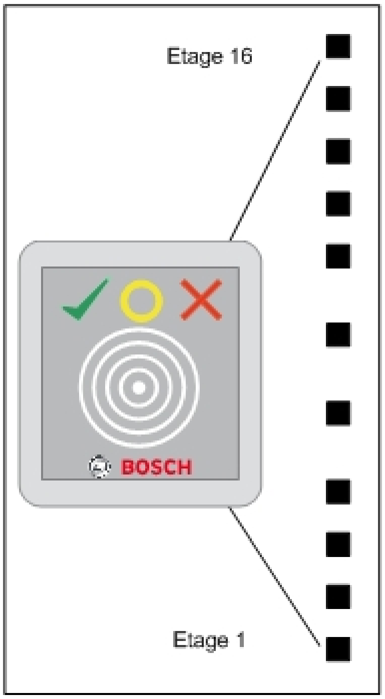
03a	Reversible turnstile with entry and exit reader
03b	Reversible turnstile with entry reader and push button
03c	Turnstile with entry reader

Note:
Man-trap locking is only active if the door is parameterized as part of a man-trap. If the door is not configured as part of a man-trap then input signal 03 is interpreted as a reader lock. In such a case if input signal 03 is set the reader will be locked.
In combination with a second door and man-trap locking it is possible to control both doors together as a man trap. Depending on the construction the entrance can perform a singling function.

20.5 Doormodel 06c

The doormodel 06c configures a reader connected to the AMC as enrollment device. It does not control an entrance.

20.6 Doormodel 07



Model variants:

07a	Elevator
07b	Elevator with reader input

Notice!
As standard, one AMC2 can be used for 8 floors. It is possible to connect more entrances under the following preconditions:
64 floors when using Wiegand (AMC2 4W + AMC2 4W-EXT + 3 AMC2 16I-16O-EXT)
56 floors when using RS 485 (AMC2 4R4 + 3 AMC2 16I-16O-EXT)

Signals of entrance model 07a:

Input signal	Output signals
Free	Floor 01
Free	Floor 02
Free	Floor 03
Free	Floor 04
...	...
Free	Floor 16

Procedure:
First, the cardholder summons the elevator. This can be done either via the elevator's own hardware button, or via a card reader (e.g. Door model 01c).
Next, inside the elevator is another card reader (Door model 07a). This reader grants access to those floors for which the user's card contains authorizations. The authorized floors can be indicated to the user, for example, by illuminating only the buttons for those floors. The user can then select only one of the authorized floors.

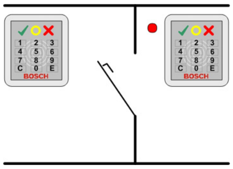
Signals of entrance model 07b:

Input signal	Output signals
Input key - floor 01	Floor 01
Input key - floor 02	Floor 02
Input key - floor 03	Floor 03
Input key - floor 04	Floor 04
...	...
Input key - floor 16	Floor 16

Procedure:
First, the cardholder summons the elevator. This can be done either via the elevator's own hardware button, or via a card reader (e.g. Door model 01c).
Next, inside the elevator the user presents his/her card to another card reader (Door model 07b), and then presses the button for the desired floor. The AMC checks whether the user is authorized for the selected floor and, if so, the lift takes the user there.

20.7 Doormodel 10

Normal door with IDS (intrusion detection system) arming/rearming



Signals:

Input signals	Output signals
Door sensor	Door opener
Pushbutton: door open	IDS: Disarm [only for models **d** and **f** with a pulse of 1 sec.]
IDS: Ready to arm	Camera / motorlock
IDS: Arrmed	IDS: Arm [only for models **d** and **f** with a pulse of 1 sec.]
Sabotage signal	Door open too long (intrusion)
IDS: Arming	

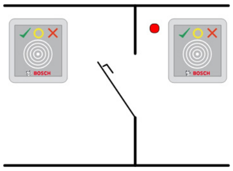
Model variants:

10a	Normal door with entry and exit reader and IDS rearming
10b	Normal door with entry reader, push button and IDS rearming
10c	Normal door with entry reader and IDS rearming
10d	Normal door with entry and exit reader and decentral IDS rearming
10e	Normal door with entry reader, push button and decentral IDS rearming
10f	Normal door with entry reader and decentral IDS rearming

Notes:
The **E** button at the entry reader can arm the IDS (intrusion detection system). An authorized card and the entry of a PIN code are required. The IDS will be disarmed upon the first authorized entry, whereby PIN-code identification will also be required. In the case of models a to c this is controlled by the output signal arm/disarm IDS.
In the case of models **d** to **f** the arming or disarming is triggered by a separate pulse of 1 second. A connected bistable relay can control the IDS for several doors (DCUs / Door control units), whereby the signals require a logical OR connection to the relay. The signals **IDS is armed** and **IDS is disarmed** must be double connected at all the relevant DCUs.

20.8 Doormodel 14

Door with IDS control



Signals:

Input signals	**Output signals**
Door sensor	Door opener
Pushbutton: door open	IDS: Disarm [only for models **d** and **f** with a pulse of 1 sec.]
IDS: Ready to arm	Camera / motorlock
IDS: Arrmed	IDS: Arm [only for models **d** and **f** with a pulse of 1 sec.]
Sabotage signal	Door open too long (intrusion)
IDS: Arming	

Model variants:

14a	Normal door with entry and exit reader and IDS arming / disarming
14b	Normal door with entry reader, push button and IDS arming / disarming
14c	Normal door with entry reader and IDS arming / disarming
14d	Normal door with entry and exit reader and decentral IDS arming / disarming
14e	Normal door with entry reader, push button and decentral IDS arming / disarming
14f	Normal door with entry reader and decentral IDS arming / disarming

Notes:

In contrast to door model 10, door model 14 can use readers with or without a keypad. A further difference exists in the assignment of IDS arming rights: only cardholders with sufficient rights are able to arm or disarm the IDS.

The arming/disarming process is not governed here by use of a PIN code, but by a button close to the reader which has the same function as key 7 on the readers with keypads. After pressing this button the status of the IDS is displayed by the colored LEDs of the reader.

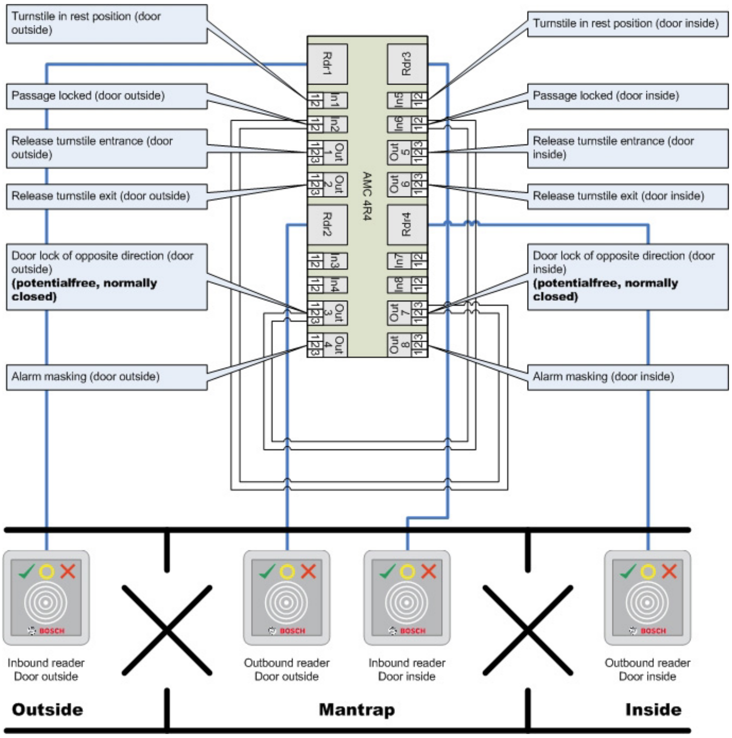
- Disarmed = alternating green/red blinking light
- Armed = continuous red light

The IDS is armed when presented with a valid card.
Disarming is carried out by pressing the button and presenting a valid card.
The door does not unlock immediately. To unlock, present the card once more after disarming.

20.9 Examples of mantrap configurations

Turnstiles are the most common means of singling cardholders' access. In the following examples we have therefore used door model 3a (turnstile with entry and exit reader).

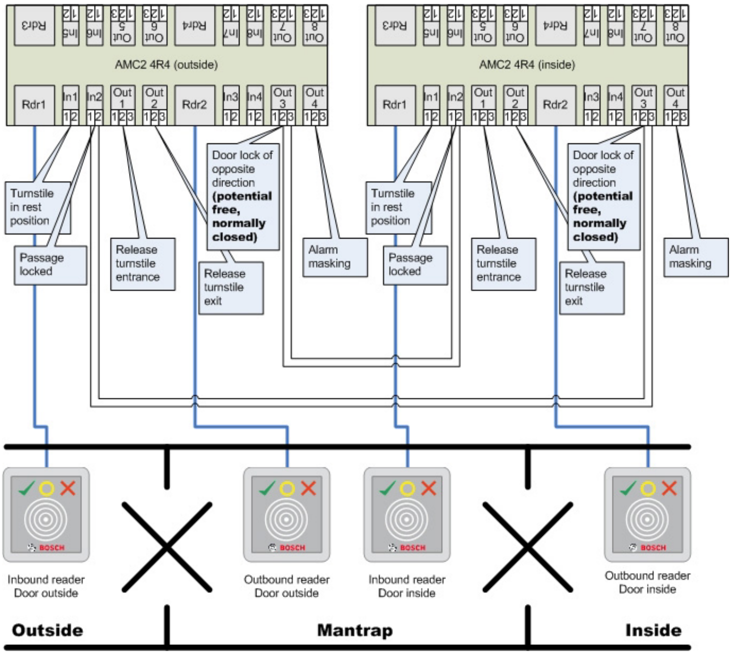
Mantrap configuration with two turnstiles (DM 03a)


Turnstile in rest position (door outside)
Passage locked (door outside)
Release turnstile entrance (door outside)
Release turnstile exit (door outside)
Door lock of opposite direction (door outside) **(potentialfree, normally closed)**
Alarm masking (door outside)
Turnstile in rest position (door inside)
Passage locked (door inside)
Release turnstile entrance (door inside)
Release turnstile exit (door inside)
Door lock of opposite direction (door inside) **(potentialfree, normally closed)**
Alarm masking (door inside)
AMC 4R4
Rdr1
In1
In2
Out 1
Out 2
Rdr2
In3
In4
Out 3
Out 4
Rdr3
In5
In6
Out 5
Out 6
Rdr4
In7
In8
Out 7
Out 8
Inbound reader Door outside
Outbound reader Door outside
Inbound reader Door inside
Outbound reader Door inside
Outside
Mantrap
Inside

Connections to the door locks for the opposite direction ensure that only one of the turnstiles can be opened at any one time.

Notice!
The output signal (Out 3) is to be set potential free (dry mode). The signal "door lock of opposite direction" must be closed (resistance=0) when de-energized. Use the "normally closed" (NC) contact of outputs 3 and 7.

Mantrap configuration with two turnstiles (DM 03a) which are distributed across two controllers.

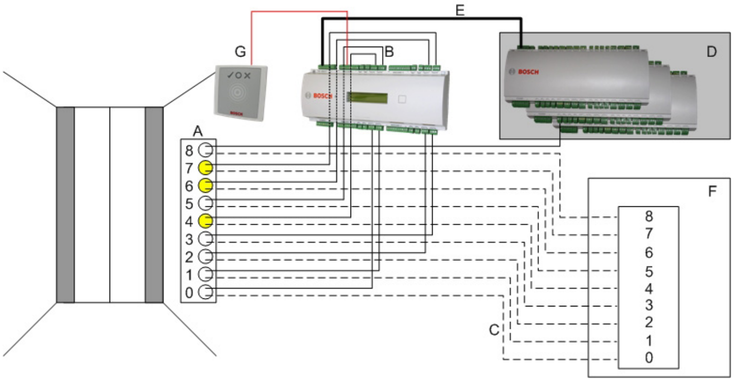

AMC2 4R4 (outside)
Rdr3
In5
In6
Out 5
Out 6
Rdr4
In7
In8
Out 7
Out 8
Rdr1
In1
In2
Out 1
Out 2
Rdr2
In3
In4
Out 3
Out 4
AMC2 4R4 (inside)
Turnstile in rest position
Passage locked
Release turnstile entrance
Door lock of opposite direction **(potential free, normally closed)**
Release turnstile exit
Alarm masking
Turnstile in rest position
Passage locked
Release turnstile entrance
Door lock of opposite direction **(potential free, normally closed)**
Release turnstile exit
Alarm masking
Inbound reader Door outside
Outbound reader Door outside
Inbound reader Door inside
Outbound reader Door inside
Outside
Mantrap
Inside

Connections to the door locks for the opposite direction ensure that only one of the turnstiles can be opened at any one time.

Notice!
The output signal (Out 3) is to be set potential free (dry mode). The signal "door lock of opposite direction" must be closed (resistance=0) when de-energized. Use the "normally closed" (NC) contact of outputs 3 and 7.

20.10 Configuring Entrance Model 07

The following illustrates the wiring of an elevator using Door Model 07a



Legend:

A = Floor buttons inside elevator

B = (solid line) AMC-output signals

C = (dashed line) Connection to elevator control

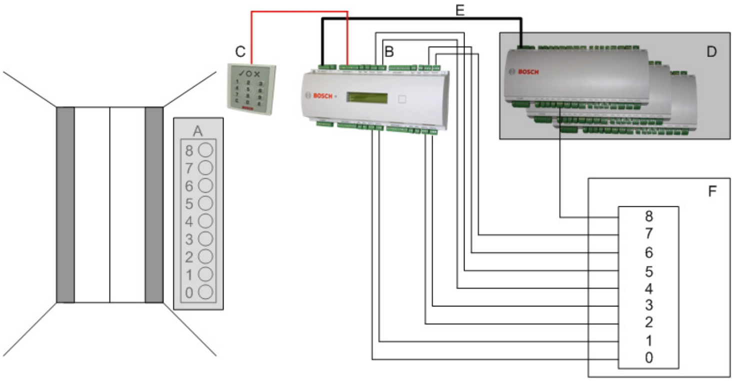
D = An I/O extension board (AMC2 8I-8O-EXT, AMC2 16I-EXT or AMC2 16I-16O-EXT) can be connected

E = Data- and power supply from the AMC to the I/O boards

F = Elevator control

G = Reader (Door model 07a)

The following illustrates the wiring of an elevator using Door Model 07b



Legend:

A = Floor buttons inside elevator

B = (solid line) AMC input signals

C = (dashed line) AMC output signals

D = An I/O extension board (AMC2 8I-8O-EXT, AMC2 16I-EXT or AMC2 16I-16O-EXT) can be connected

E = Data and power supply from the AMC to the I/O boards

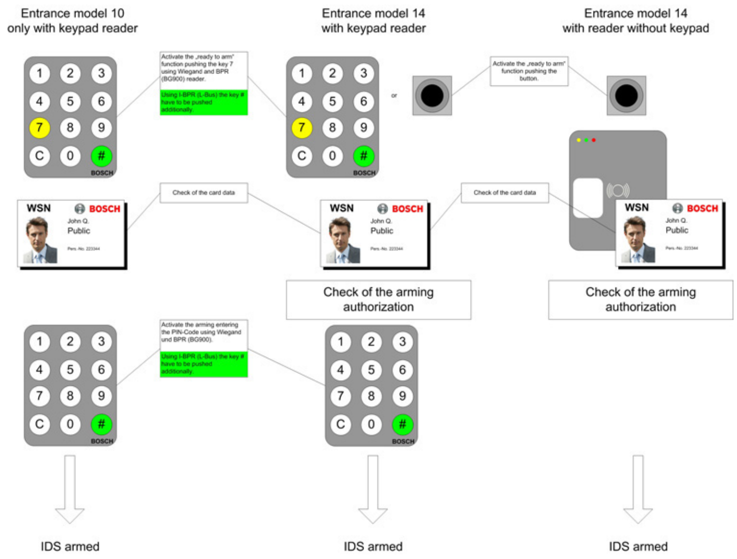
F = Elevator control

G = Reader (Door model 07b)

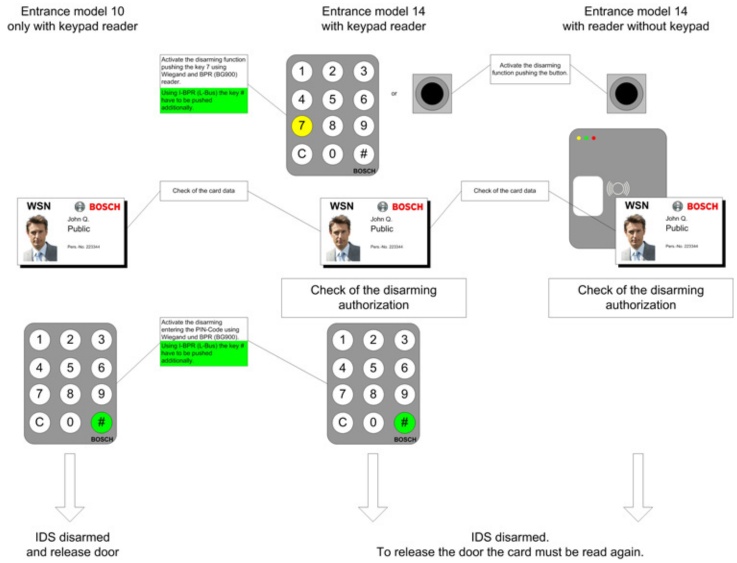
Notice!
When wiring individual floors (up to 16) to the AMC's outputs, connect first the controller's own signals and then, if present, the first eight outputs of any I/O extension boards in ascending order. [Where Wiegand extension boards(AMC2 4W-EXT) are in operation, use their outputs in ascending order after those of the AMC2 controller, and before the outputs of any I/O extension board.] For this reason it is not possible to configure any other kinds of door, or any further elevators, to an AMC that is used for elevator control.

20.11 Display Arming/Disarming

Comparison between **arming** an alarm system in Entrance (Door) models 10 and 14.


Entrance model 10
only with keypad reader
Entrance model 14
with keypad reader
Entrance model 14
with reader without keypad
Activate the „ready to arm" function pushing the key 7 using Wiegand and BPR (BG900) reader.
Using I-BPR (L-Bus) the key # have to be pushed additionally.
or
Activate the „ready to arm" function pushing the button.
Check of the card data
Check of the card data
WSN
BOSCH
John Q.
Public
Check of the arming authorization
Check of the arming authorization
Activate the arming entering the PIN-Code using Wiegand und BPR (BG900).
Using I-BPR (L-Bus) the key # have to be pushed additionally.
IDS armed
IDS armed
IDS armed

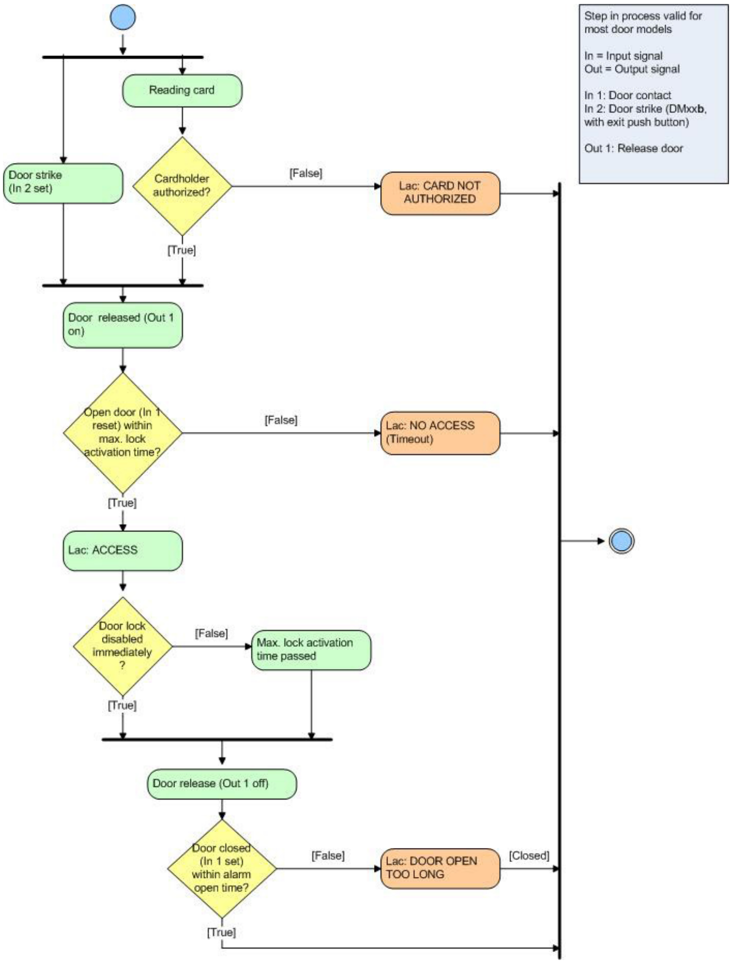
Comparison between **disarming** an alarm system in Entrance (Door) models 10 and 14.


Entrance model 10
only with keypad reader
Entrance model 14
with keypad reader
Entrance model 14
with reader without keypad
Activate the disarming function pushing the key 7 using Wiegand and BPR (BG900) reader.
Using I-BPR (L-Bus) the key # have to be pushed additionally.
or
Activate the disarming function pushing the button.
Check of the card data
Check of the card data
WSN
BOSCH
John Q.
Public
Check of the disarming authorization
Check of the disarming authorization
Activate the disarming entering the PIN-Code using Wiegand und BPR (BG900).
Using I-BPR (L-Bus) the key # have to be pushed additionally.
IDS disarmed
and release door
IDS disarmed.
To release the door the card must be read again.

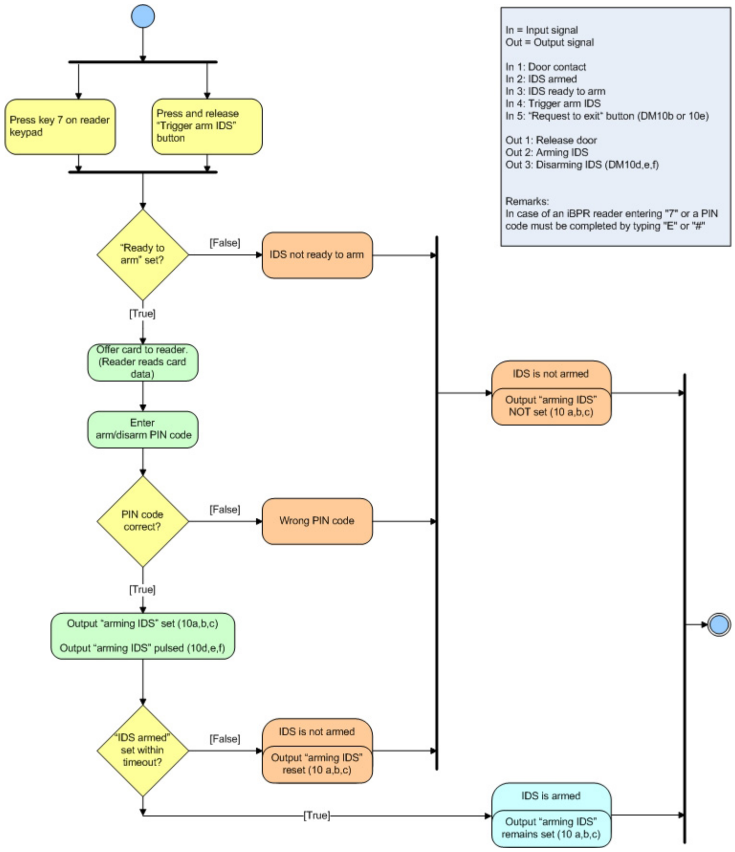
20.12 Procedures in Access Control

Flow charts of procedures in Access Control

Door model DM01



Door model DM10 - arming


Press key 7 on reader keypad
Press and release "Trigger arm IDS" button
"Ready to arm" set?
[False]
IDS not ready to arm
[True]
Offer card to reader. (Reader reads card data)
Enter arm/disarm PIN code
PIN code correct?
[False]
Wrong PIN code
[True]
Output "arming IDS" set (10a,b,c)
Output "arming IDS" pulsed (10d,e,f)
"IDS armed" set within timeout?
[False]
IDS is not armed
Output "arming IDS" reset (10 a,b,c)
[True]
IDS is not armed
Output "arming IDS" NOT set (10 a,b,c)
IDS is armed
Output "arming IDS" remains set (10 a,b,c)

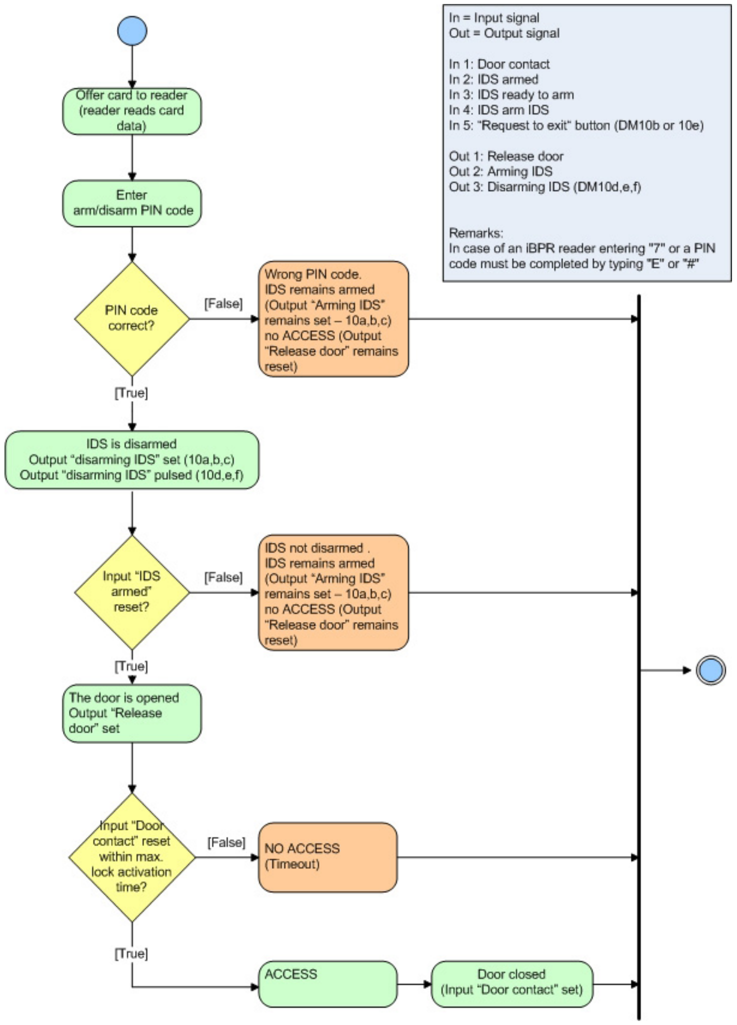
In = Input signal
Out = Output signal

In 1: Door contact
In 2: IDS armed
In 3: IDS ready to arm
In 4: Trigger arm IDS
In 5: "Request to exit" button (DM10b or 10e)

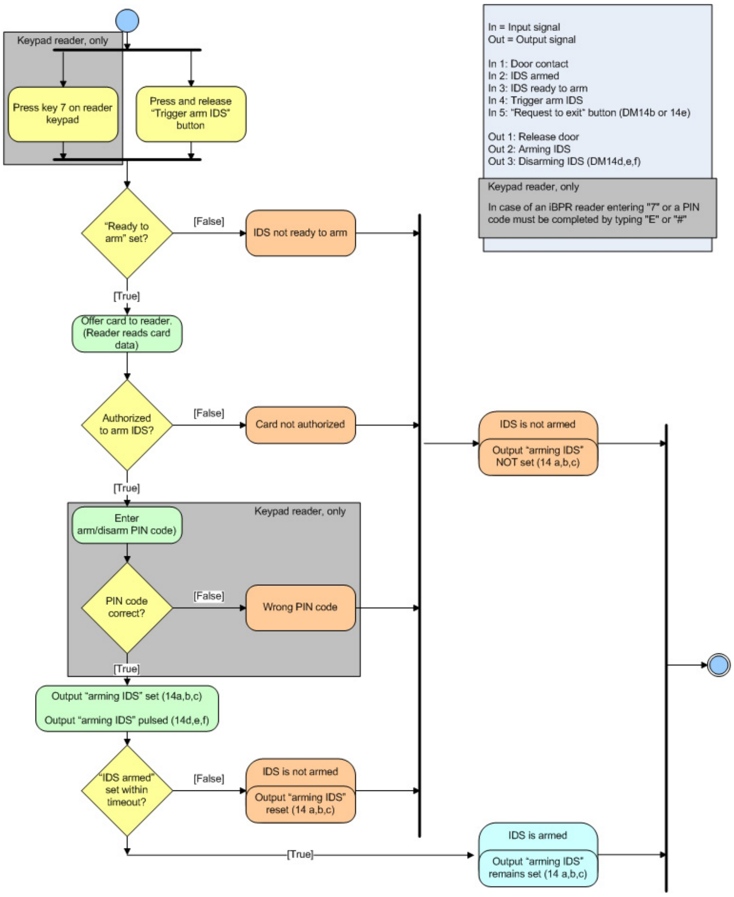
Out 1: Release door
Out 2: Arming IDS
Out 3: Disarming IDS (DM10d,e,f)

Remarks:
In case of an iBPR reader entering "7" or a PIN code must be completed by typing "E" or "#"

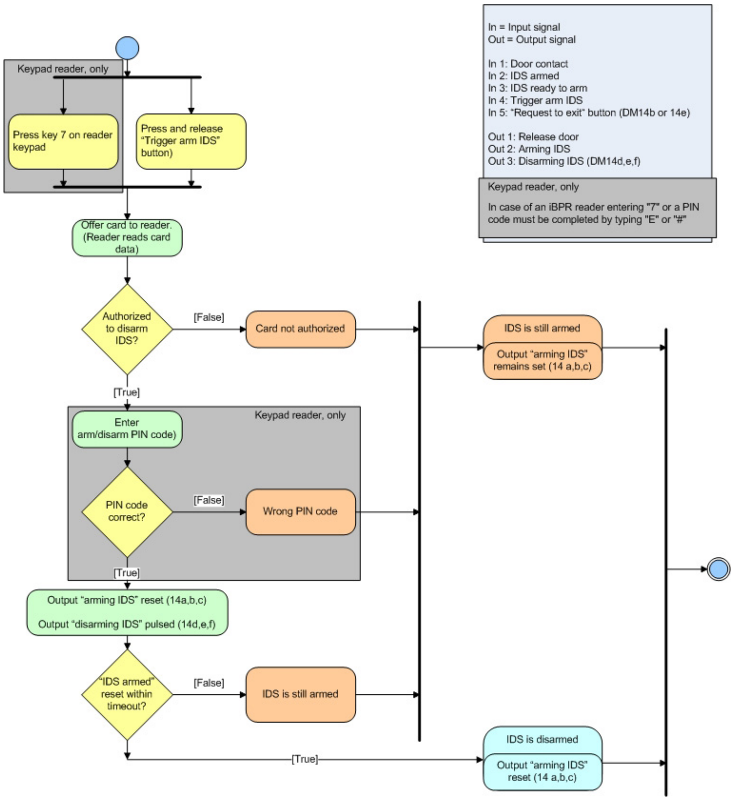
Door model DM10 - disarming


In = Input signal
Out = Output signal
In 1: Door contact
In 2: IDS armed
In 3: IDS ready to arm
In 4: IDS arm IDS
In 5: "Request to exit" button (DM10b or 10e)
Out 1: Release door
Out 2: Arming IDS
Out 3: Disarming IDS (DM10d,e,f)
Remarks:
In case of an iBPR reader entering "7" or a PIN code must be completed by typing "E" or "#"
Offer card to reader (reader reads card data)
Enter arm/disarm PIN code
PIN code correct?
[False]
Wrong PIN code. IDS remains armed (Output "Arming IDS" remains set – 10a,b,c) no ACCESS (Output "Release door" remains reset)
[True]
IDS is disarmed Output "disarming IDS" set (10a,b,c) Output "disarming IDS" pulsed (10d,e,f)
Input "IDS armed" reset?
[False]
IDS not disarmed . IDS remains armed (Output "Arming IDS" remains set – 10a,b,c) no ACCESS (Output "Release door" remains reset)
[True]
The door is opened Output "Release door" set
Input "Door contact" reset within max. lock activation time?
[False]
NO ACCESS (Timeout)
[True]
ACCESS
Door closed (Input "Door contact" set)

Door model DM14 - arming


Keypad reader, only
Press key 7 on reader keypad
Press and release "Trigger arm IDS" button
In = Input signal
Out = Output signal
In 1: Door contact
In 2: IDS armed
In 3: IDS ready to arm
In 4: Trigger arm IDS
In 5: "Request to exit" button (DM14b or 14e)
Out 1: Release door
Out 2: Arming IDS
Out 3: Disarming IDS (DM14d,e,f)
Keypad reader, only
In case of an iBPR reader entering "7" or a PIN code must be completed by typing "E" or "#"
"Ready to arm" set?
[False]
IDS not ready to arm
[True]
Offer card to reader. (Reader reads card data)
Authorized to arm IDS?
[False]
Card not authorized
IDS is not armed
Output "arming IDS" NOT set (14 a,b,c)
[True]
Keypad reader, only
Enter arm/disarm PIN code)
PIN code correct?
[False]
Wrong PIN code
[True]
Output "arming IDS" set (14a,b,c)
Output "arming IDS" pulsed (14d,e,f)
"IDS armed" set within timeout?
[False]
IDS is not armed
Output "arming IDS" reset (14 a,b,c)
[True]
IDS is armed
Output "arming IDS" remains set (14 a,b,c)

Door model DM14 - disarming


Keypad reader, only
Press key 7 on reader keypad
Press and release "Trigger arm IDS" button)
Offer card to reader. (Reader reads card data)
Authorized to disarm IDS?
[False]
Card not authorized
[True]
Keypad reader, only
Enter arm/disarm PIN code)
PIN code correct?
[False]
Wrong PIN code
[True]
Output "arming IDS" reset (14a,b,c)
Output "disarming IDS" pulsed (14d,e,f)
"IDS armed" reset within timeout?
[False]
IDS is still armed
[True]
IDS is still armed
Output "arming IDS" remains set (14 a,b,c)
IDS is disarmed
Output "arming IDS" reset (14 a,b,c)
In = Input signal
Out = Output signal
In 1: Door contact
In 2: IDS armed
In 3: IDS ready to arm
In 4: Trigger arm IDS
In 5: "Request to exit" button (DM14b or 14e)
Out 1: Release door
Out 2: Arming IDS
Out 3: Disarming IDS (DM14d,e,f)
Keypad reader, only
In case of an iBPR reader entering "7" or a PIN code must be completed by typing "E" or "#"

20.13 Access PE ports

The individual processes and applications in Access PE use the following ports.

Connection between...	Client/AMC	Server
Client - LacSp	Undefined	43434/tcp
AcPers - CP	Undefined	20005/tcp
LacSp - AMC	10001/udp	54545/udp and above

21 PIN types

Access Professional Edition provides each cardholder with up to three Personal Identification Numbers (**PIN**s) which can be used for different purposes:

- **Verification-PIN**
  This PIN can be requested from cardholders as an extra security feature at special entrances. The verification PIN is compared with stored data for the cardholder to ensure that s/he is the real owner of the card presented.
  Each person can choose his/her own 4-8 digit PIN in accordance with certain general rules (e.g. no numerical sequences and no palindromes). [The parameter for the length of the PIN applies equally to verification-, arming- and door-PINs]. A verification-PIN does not have to be unique in the system.
  If no separate arming-PIN has been defined [i.e. as long as the check box **use separate IDS-PIN** is not selected in the dialog Configurator > Settings] then the verification PIN may also be used to arm/disarm the IDS.
- **Arming-PIN / IDS-PIN**
  This special PIN is used exclusively to arm and disarm the alarm system. With door models 10 and 14 first press the 7 key or the door's push-button.
  Each person can choose his/her own 4-8 digit PIN in accordance with certain general rules (e.g. no numerical sequences and no palindromes). [The parameter for the length of the PIN applies equally to verification-, arming- and door-PINs]. An arming-PIN does not have to be unique in the system.
  If the cardholder wishes simply to pass through the door, and is required to enter a PIN, then the verification-PIN must be used. If the the check box **use separate IDS-PIN** is selected (Configurator > General settings) then the verification-PIN can no longer be used to arm/disarm the IDS. It is only then that the relevant input fields become visible in the Personnel dialog.

Notice!
In order to ensure compatibility with previous Access PE versions the check box for use of separate IDS-PIN is cleared by default.

- **Identification-PIN/ ID-PIN**
  This PIN identifies a person's card and must therefore be unique within the system. Once input this PIN grants access to the person in accordance with all his/her defined authorizations. To ensure uniqueness the PIN is generated by the system and assigned to the person, whereby the system adheres to the general rules (no numerical sequences and no palindromes).
  Like a physical credential the Identification-PIN enforces the restrictions assigned to its owner (blocks, time models, authorizations etc.).
  Depending on the reader protocol, you must enter the Identification PIN on the reader, along with the additional characters required. In the case of readers enter the pin as follows: **4 # (Enter) PIN # (Enter)**. For all other protocols, the PIN is entered immediately and followed by **# (Enter)**.
  The length of this PIN is configurable to between 4 and 8 digits.
  [**Note:** The length of ID-PINs should bear relation to the size of the installation, in order to render active PINs harder to guess. For instance, if the installation has 1000 cardholders then the PINs should be at least 6 digits long in order to make the guessing of a valid PIN sufficiently improbable, and random guesses more likely to generate alarms.]

The PIN types described above are all person-related and therefore defined and maintained along with other personnel data. A fourth type is the so-called door-PIN.

- **Door-PIN**
  The PIN belongs to an entrance (Configurator > Entrances). It must be known by all persons authorized to use it. instead of the PIN a card may also be used at such entrances (see = Function **PIN or card**).
  This PIN too can be 4 to 8 digits long. If the use of the door-PIN is deactivated (e.g. by a time model) then access is only by card. An identification-PIN will not work either in this case.

Notice!
The Identification- and door-PIN-types can not be used with IDS-arming door models 10 and 14.

22 UL 294 Requirements

The following Bosch model card readers were evaluated by UL for compatibility with the Bosch's APE-SW software system:

- LECTUS secure 1000 WI
- LECTUS secure 4000 WI
- LECTUS secure 5000 WI

Features evaluated by UL:

- 26-bit Wiegand format readers
- AMC2 Controllers:
  - APC-AMC2-4WCF
  - API-AMC2-4WE
  - API-AMC2-8IOE
  - API-AMC2-16IOE
- APE-SW as supplementary monitoring equipment

Features not evaluated by UL:

- The Video Verification System
- Map Viewer and Alarm Management with Map and Video Verification
- Video Player
- Badge Designer
- The Delta 1200 Series
- Rosslare ARD-1200EM Series
- LAC Controllers
- LACi Controllers
- APC-AMC2-4R4CF Controllers
  - BG 900 reader interface protocol
  - L-BUS reader interface protocol
- Security System IDS - Arming/Disarming
- Elevator Use
- Texts
- Burglar Alarm Use

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