

SecuriFire Studio

SRP 2.0

Manual



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1 Introduction

SecuriFire Studio is the standard PC application complete with all software modules (programs) for project planning, commissioning, maintenance and diagnostics of all the control panels and indication and control maps belonging to the SecuriFire system family and for the detector loop periphery.

Use of the software is individually regulated by means of a dongle and licensing.

Once the software is installed, the language used for the user interface and the online help can be selected dynamically from German, French, Italian and English.

SecuriFire Studio is used for all applications and control panel types of the SecuriFire system family:

- SCP3000 FCP Fire alarm control panel, modular system
- SCP3000 ECP Multi-area extinguishing control panel
- SCP3000 FEP Combined fire alarm/multi-area extinguishing control panel

- SCP2000 FCP Fire alarm control panel, compact system (2 loops)
- SCP2000 ECP Single-area extinguishing control panel
- SCP2000 FEP Combined fire alarm/single-area extinguishing control panel

- SCP1000 FCP Fire alarm control panel, 1 loop
- SCP500 FCP Fire alarm control panel, 1 loop

This document focuses on the system planning and the configuration of the loop devices.

The other elements of SecuriFire Studio are described in the Online Help.

Documents complementing this Manual:

- SecuriFire Studio Online Help
- SecuriFire Studio Release Notes
- SecuriFire Studio Installation Instructions
- SecuriFire Studio Dongle Driver Installation
- Data sheets and technical documentation for the hardware components

SecuriFire Studio Manual	
SecuriFire Online Help	
Project [SW_Manual_201.bsa]	
✓ System information	✓
✓ Projection	✓
✓ Projection download	✓
✓ Loop configuration	✓
✓ Loop configuration download	✓
✓ Object texts	✓
✓ Object texts download	✓
✓ Data Center	✓
✓ Maintenance	✓
! Project file download	✓
Tools	
LoopAnalysis	✓
Reporting	✓
ServiceMonitor	✓
ServiceCenter	✓
SystemInformation	✓
SystemDesigner	✓
DocumentExplorer	✓
VersionDatabase	✓
Traceability	✓

Each edition of SecuriFire Studio is assigned a release No. The SecuriFire Release Package SRP 2.0 comprises the SecuriFire Studio Release No. 2.0.x.



Notice

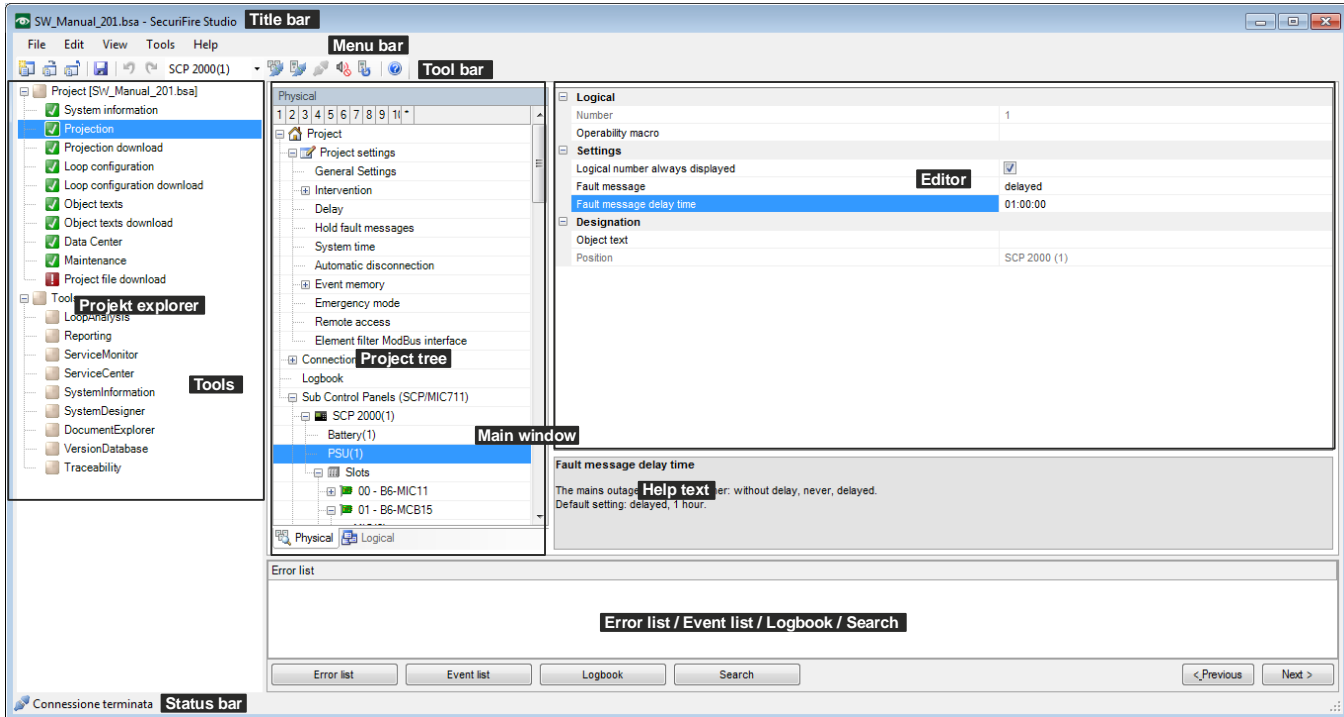
This Manual describes the scope of SecuriFire Studio.
The actual functional scope of your system will depend on the project planning / programming.

2 SecuriFire Studio

A licensed dongle is required to start SecuriFire Studio.

2.1 Design of the user interface

The SecuriFire Studio user interface is designed according to the Explorer concept and comprises the following main elements.



Title bar: The title bar displays the name of the project file alongside the Securiton logo.

Menu bar: The menu bar contains the main menus. The sub-menus are displayed dynamically as active or inactive depending on the application.

Tool bar: The tool bar is situated immediately below the menu bar. It features the standard icons, with additional icons displayed dynamically depending on the application.

Project Explorer: The Project Explorer on the left-hand side of the SecuriFire Studio interface is divided into two main items:

1. Main project steps These are the steps carried out for a system's complete commissioning.
2. Tools These are independent of the commissioning and provide tools for system maintenance, etc.

The Project Explorer can be switched off to provide more space for the **main window**.

Main window: The **Project tree** contains the sub-steps of the Project Explorer. The **Editor** is used to enter the actual data. A **Help text** is displayed for each of the Editor's individual fields.

Displayed below the main window is either the **Error list**, the **Event list**, the **Logbook** or the **Search** function. This area can be switched off to provide more space for the **main window**.

Status bar: The status bar displays the possible states of the physical connection between SecuriFire Studio and the SecuriFire control panel.

2.2 Definitions

2.2.1 System information

The "System information" project step is used to enter the data used for identifying the system.

The screenshot shows the 'System information' form in SecuriFire Studio. The form is titled 'System information' and 'Fill in the general system information'. It is divided into three main sections: 'General system information', 'Responsible person for this fire alarm system', and 'Description'. The 'General system information' section includes fields for Installation name, Installation number, Street / No., Code / City, Country / Region, Telephone, and Fax. The 'Responsible person for this fire alarm system' section includes fields for Name, Telephone, and Mobile phone for two individuals. The 'Description' section is a large text area. Three black boxes with white numbers 1, 2, and 3 are overlaid on the form to indicate the sections described in the text below.

(1) General system information

These fields are used to enter the data used for identifying the system.

The "Installation name" and "Installation number" fields are used by SecuriFire Studio for automatically generating the project folders and project file names. See also Chap. 4.2 Information on handling of versions.

(2) Persons responsible for this fire alarm system

These fields are used to enter the data used for identifying the persons responsible for this system (by the system operator).

(3) Description

Information on particularities of the system and program change information for each version. This ensures that any changes made to the project planning can be tracked.

2.3 Planning

The **Projection (1)** project step is used for the actual project planning of the system. The physical objects and logical objects of a system are entered here and their behaviour is defined. The **Project tree (2)** is used to navigate within the step, with a distinction made between **physical** and **logical** views (3).

2.3.1 Wizards

Programming aids in the form of Assistants are available for the following tasks:

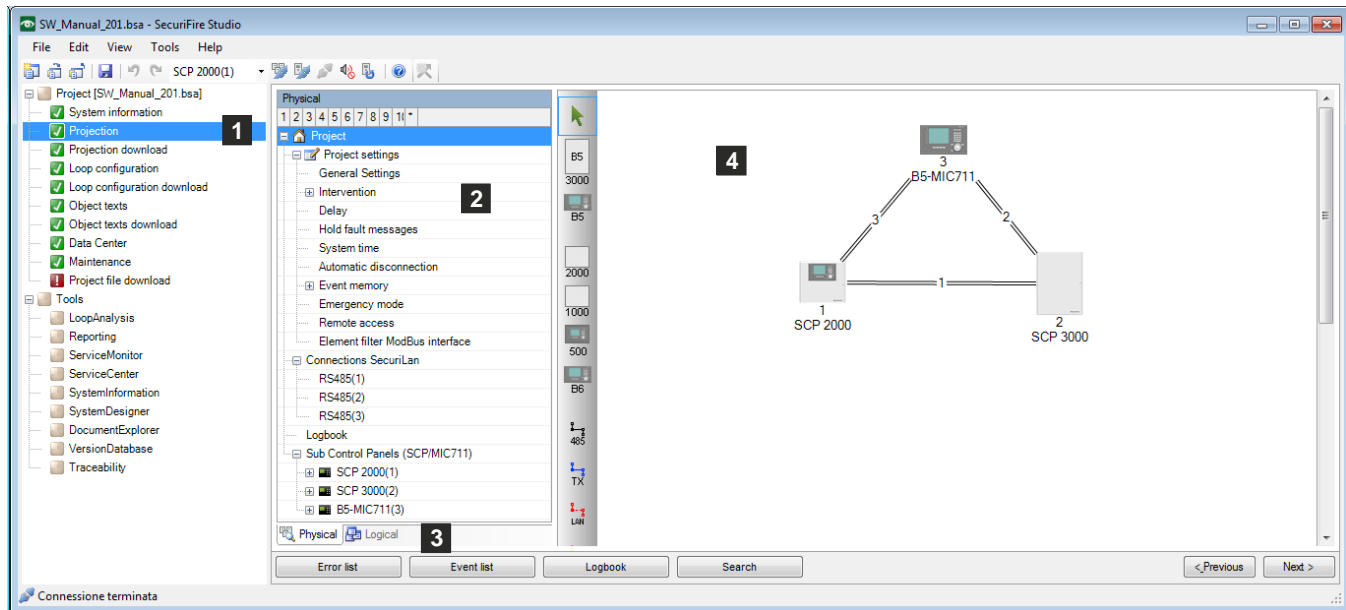
- EasyConfig SecuriFire 500: for planning the SecuriFire 500. See Chap. 2.9.1
- SCP Upgrade Wizard: replaces a SCP with a more powerful SCP type. See chap. 2.9.2
- Card/unit Upgrade-Wizard: Replaces a card/unit with a newer type. See chap. 2.9.3
- Detector Upgrade Wizard: for updating the detector types. See Chap. 2.9.4

2.3.2 Project

Physical view, logical view]

(4) Project Editor

- Selects the SecuriLan participants (control panels and MIC711) and places them on the graphical interface.
- Selects the connection type and connects the participants using the Networking Editor.
- Option: an image can be stored in the graphic area (e.g. building plan)



2.3.3 Project settings

(1) System language

Selects the language(s) for the display on the indication and control maps within the system. For each indication and control map one of these languages can be selected as the (idle) display language.

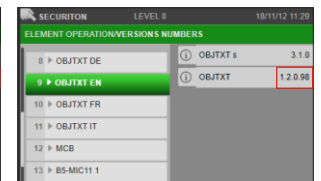
[2] Download Version

The project version is displayed in the following format: V2.0.x.xx. V.2.0 corresponds to the project planning tool release. x.xx is a serial number incremented after every download, see also Chap 2.3.16 Logbook.

Physical view, logical view

Physical	
1	2
3	4
5	6
7	8
9	10
11	12
Project	
Project settings	
General Settings	
Intervention	
Delay	
Hold fault messages	
System time	
Automatic disconnection	
Event memory	
Emergency mode	
Remote access	

Standard	
System language	1 German;English;French;Italian
Version	2 1.2.0.96
System information	
System name	Securiton
Project number	123456-001
Address	Alpenstrasse 20
Postal code	3052
City	Zollikofen
Region	Bern
Country code	CH
Telephone number	+41 31 910 11 22
Fax number	+41 31 911 25 32



The project version number can be verified on the MIC; this applies to the project planning, the loop configuration and the object texts.

2.3.4 General settings

Physical view, logical view

Physical

1 2 3 4 5 6 7 8 9 10

- Project
 - Project settings
 - General Settings**
 - Intervention
 - Delay
 - Hold fault messages
 - System time
 - Automatic disconnection
 - Event memory
 - Emergency mode
 - Remote access
 - Element filter ModBus interface
 - Connections SecuriLan
 - RS485(1)
 - RS485(2)
 - RS485(3)
 - Logbook
 - Sub Control Panels (SCP/MIC711)
 - SCP 2000(1)
 - SCP 3000(2)
 - B5-MIC711(3)

Settings		
Top bar and quiescent state display individually per SCP	1	<input type="checkbox"/>
Top bar display MIC/FIP	2	Securiton
Quiescent state display MIC/FIP	3	SecuriFire FCP
Programmer	4	Johnny
Message at warm-start	5	<input checked="" type="checkbox"/>
Message Contamination only in day-mode	6	<input checked="" type="checkbox"/>
Save active status of FPE-LEDs	7	<input type="checkbox"/>
Detector-LED blinks when unfiltered alarm (DA/DX/LXI)	8	<input checked="" type="checkbox"/>
Range operation with element number 0	9	<input checked="" type="checkbox"/>
Start inspection when button <Buzzer reset> is pressed	10	<input checked="" type="checkbox"/>
Start inspection when button <Alarm units reset> is pressed	11	<input checked="" type="checkbox"/>
Reactivation outputs subtype main siren/sub siren	12	<input type="checkbox"/>
Reactivation alarm areas subtype acoustic	13	<input type="checkbox"/>
Logical numbers		
Logical number start	14	1
Numbering behaviour	15	Fill gaps
Create and assign automatically logical outputs	16	<input type="checkbox"/>
Leading zeros at display		
Display leading zeros	17	<input type="checkbox"/>
Digits element-number	18	4
Digits indicator number	19	3
Separator		
Separator for element number	20	(-)
Reset options		
Button "System/Alarm reset" affects also faults	21	<input checked="" type="checkbox"/>
Button "System/Alarm reset" affects also extinguishing system	22	<input type="checkbox"/>
Password		
Read protected with password	23	<input type="checkbox"/>
Project password	24	
SCP/MIC711 is password protected	25	<input type="checkbox"/>
Please enter the password of the SCP/MIC711.	26	
Network settings		
Settings individually per SCU/MIC711	27	<input type="checkbox"/>
IP range	28	192.168.192
Subnet mask	29	255.255.192.0
Standard Gateway	30	0.0.0.0
DNS server		
Use DNS	31	<input type="checkbox"/>
DNS Server 1 IP address	32	0.0.0.0
DNS Server 2 IP address	33	0.0.0.0
NTP- Network Time Protocol		
Use NTP	34	<input type="checkbox"/>
NTP address	35	
Project download		
Storage location for project file	36	SCP 2000(1);SCP 3000(2);B5-MIC711(3)
Automatic project file download	37	<input type="checkbox"/>
Text lengths		
Text lengths validation for FIP and FAT	38	<input type="checkbox"/>
Characters per line for FIP	39	20
Characters per line for FAT	40	16
Element name with number		
Leading zeros inserting when creating	41	<input type="checkbox"/>
Download		
Automatic restart after projection download	42	<input checked="" type="checkbox"/>
Automatic restart after loop configuration download	43	<input type="checkbox"/>
Critical outputs		
Call back for command "Trigger" for critical outputs	44	<input type="checkbox"/>
Display filter for event lists		
Use display filter	45	<input type="checkbox"/>
Status pre-alarm		
Status pre-alarm enabled	46	<input type="checkbox"/>
Time Zone		
UTC time offset	47	-03:00
Alternating activation		
Time of activation [sec]	48	7.5
Number of groups for alternating activation	49	0
Acoustic settings		
Interrupt tone for MLAR	50	DIN tone
Compatibility Settings		
Suppress alarm details	51	<input type="checkbox"/>

(1) Top bar and quiescent state display individually per SCP

Option inactive: All MICs/FIPs on this system have the same text in the top bar or quiescent state display.

Option active: The texts for the top bar or quiescent state display on the MIC/FIP can be configured individually for each SCP.

(2) Top bar display MIC/FIP

This text is displayed in the top bar of the display. It can be up to 16 characters long.

(3) Quiescent state display MIC/FIP

This text appears in the middle of the display in the system's normal state.

(4) Programmer

Name of the person carrying out the project planning.

(5) Message at warm start

The "Warm start" fault must be reset manually using MIC (Y/N)

(6) Message contamination only in day mode

Any contamination that occurs during the night is displayed only after the switchover to day mode on the control panel. This is subject to day/night mode having been programmed via the delay layer.

(7) Save active status of FPE LEDs

Saves the active status of the collective displays for fire protection equipment (actuation, trigger and fault) in the fire detector state

(8) Detector LED blinks when unfiltered alarm (DAI/DXI/LXI)

The detector LED starts to flash if the fire characteristic (smoke, heat) that can lead to an alarm on the system is detected and the detector is in the armed state.

(9) Range operation with element number 0

The input of element number 0 allows a command to be made for ALL the elements of the selected element type.

(10) Start inspection when button <Buzzer reset> is pressed

If this option is set, pressing the "Buzzer reset" button will also reset the sirens.

(11) Start inspection when button <Alarm units reset> is pressed

If this option is set, the buzzer is reset when the "Alarm units reset" button is pressed.

(12) Reactivation outputs subtype main siren/sub siren

If the option is set, the outputs with the main/ancillary siren subtype are activated at each further alarm (collective alarm) regardless of the assigned activation criterion, provided they are configured to "Reactivation possible".

(13) Reactivation alarm areas subtype acoustic

If the option is set, the alarm areas with the acoustic subtype are activated at each further alarm (collective alarm) regardless of the assigned activation criterion, provided they are configured to "Reactivation possible".

(14) Logical number start

When SecuriFire Studio assigns a logical number to a newly created element, this entry is used as an offset.

(15) Numbering behaviour

Instruction to SecuriFire Studio either to fill existing gaps when assigning logical numbers or to continue at the highest number.

(16) Create and assign automatically logical outputs

If new outputs are planned in (e.g. B3-REL10) the relevant logical outputs can be made manually or automatically by SecuriFire Studio.

(17) Display leading zeros

If this option is selected, a fixed number of digits can be defined for displaying the element number and indicator number.

(18) Digits, element number

It is possible to display the element number (e.g. detection zone) using two, three, four or five digits. If the element number is smaller than two, three, four or five digits, the blank digit is filled with a zero.

(19) Digits, indicator number

It is possible to display the indicator number (e.g. detector) using two or three digits. If the indicator number is smaller than two or three digits, the blank digit is filled with a zero.

(20) Separator for element number

Selects one of the characters (-) , (.) ,(/), (:) for separating MG-DET. The character is edited using the " * " key.

(21) Button "System/Alarm reset" also affects faults

Pressing the "System/Alarm reset" button also resets faults.

(22) Button "System/Alarm reset" also affects extinguishing system

Pressing the "System/Alarm reset" button also resets the extinguishing system element. This allows the corresponding controls to end the trigger state.

(23) Read protected with password

This option is used to stipulate whether a password is needed to open this planning file with SecuriFire Studio. The file can always be uploaded from the SCP to the PC, regardless of this setting.

(24) Project password

Defines the password that has to be entered to open this planning file.

(25) SCP/MIC711 is password protected

This option is used to stipulate whether a password is needed to access the SCP/MIC711 with SecuriFire Studio.

(26) SCP/MIC711 password

Definition of the password which must be entered to access the SCP/MIC711 with SecuriFire Studio.

(27) Settings individually per SCU/MIC711

Option inactive: All the SecuriLan participants must be in the same subnet.

Option active: Networking expanded beyond a common subnet, allowing different locations to be networked via the internet.

(28) IP range

Indicates the first 3 bytes of the network address for the SecuriLan. The fourth byte corresponds to the SCP/MIC711 device number and is assigned permanently by SecuriFire Studio.

(29) Subnet mask

The 4 bytes of the subnet mask are used to divide the IP address into a network part and a device part.

(30) Standard gateway

The address of standard gateway can be entered here if required.

(31) Use DNS

A DNS server is needed if URLs (e.g.: www.example.com) are used in the project. The DNS server supplies the IP address to the corresponding URL.

(32) DNS server 1 IP address

IP address of DNS server 1

(33) DNS server 2 IP address

IP address of DNS server 2

(34) Use NTP

Synchronizes the system time via the NTP server. (NTP=Network Time Protocol)

(35) NTP address

Possible formats for the address.

IP address: e.g. 192.168.1.11

URL: e.g. www.example.com

Important: if the address is entered as a URL, a DNS server must be specified (in "General settings").

(36) Storage location for project file

Default setting specifying the SCP or MIC711 for the project file download.

(37) Automatic project file download

Option inactive: The download of the project file must be made manually in the "Download project file" step.

Option active: SecuriFire carries out the project file download automatically together with each projection download, loop configuration download or object text download. This ensures that the most recent *.bsa file is always available on each control panel.

(38) Text lengths validation for FIP and FAT

Activates the check according to the following settings.

(39) Characters per line for FIP

If FIP is planned for the project, all the object texts will be checked for the number of characters per line specified here (Permissible range 0 ... 20).

(40) Characters per line for FAT

If FAT is planned for the project, all the object texts will be checked for the number of characters per line specified here (Permissible range 0 ... 16).

(41) Leading zeros inserting when creating

No impact on the texts on the MIC! This option only concerns elements with names with the format "Name_Number" generated by Studio.

Option set: The number is generated as 4-digit, with leading zeros. This is to ensure consistent sorting if the generated name is retained. e.g. Detectionzonemacro_0001

Option not set: Conventional numbering. e.g. Detectionzonemacro_1

(42) Automatic restart after projection download**(43) Automatic restart after loop configuration download**

These options replace the manual restart.

(44) Call back for command "Trigger" for critical outputs

Outputs with the "Critical" setting have a special response:

MIC => trigger only after confirmation prompt

ServiceCenter => trigger only via the command "Trigger (critical elements)"

(45) Use display filter

This setting has no effect on the MIC. It concerns the scanning of the event memories of the B5-MMI-FIP by repeatedly pressing the "Faults" key.

(46) Status pre-alarm enabled

This setting only has an effect when planning a 2-detector dependency:

If the option is set, the alarm of the first detector is displayed as a "pre-alarm".

If the option is not set, the alarm of the first detector is displayed as an "alarm".

See also Chap "2.7.2.1 Responses when planning a 2–detector dependency"

(47) UTC time offset

Used to input the time zone, e.g. Amsterdam, Berlin, Bern, Rome, Stockholm (UTC +01:00), Brasilia (UTC -03:00);

(48) Time of activation [sec]

If the alternating activation of sirens is active, then the alarm tone is output during this time. The quiescent time is dependent on the number of groups for alternating activation.

(49) Number of groups for alternating activation

The sirens can be divided into groups for sequential activation. Example: With four groups, only 25% of the detector acoustics are activated at any one time. The ratio of activation time to quiescent time is 1:4 in this example.

(50) Interrupt tone for MLAR

This setting affects the following CT (continuous tone) signal transmitters which are operated on a siren loop (MLAR): MCD573X-SCT, MCD573X-SPCT and BX-SOL-CT. Activated sirens or voice messages are deactivated in the event of a loop failure/restart and the siren tones specified here are output.

(51) Suppress alarm details

Used for reverse compatibility. If this function is activated, then alarm signals are transmitted as "General alarm" via ISP and are also displayed in the control panel (instead of "Smoke alarm", for example). This is mandatory when operating the Securi-ton SLS management system via the IPS interface.

2.3.6 Inspection zones

(1) Name

User-definable text used for identifying the element.

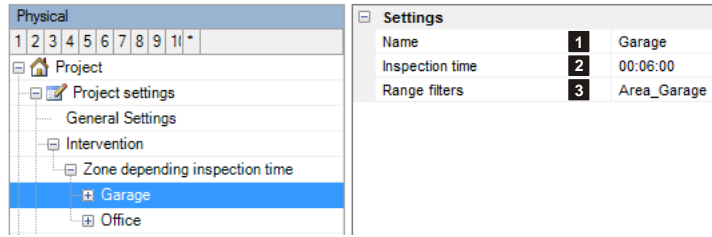
(2) Inspection time

Inspection time requested (min. 1.00 s to max. 18.00 h) for this inspection range.

On VdS/EN54 compliant systems, the sum of the acknowledgement time and inspect time must not exceed 10 minutes.

(3) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.



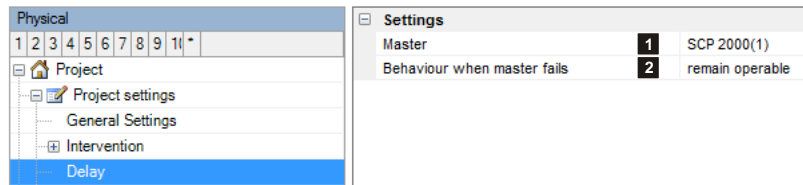
2.3.7 Delay

Physical view, logical view

The Master SCP of the delay layers is specified here. The behaviour of the delay layers in the event of a failure of the Master can also be planned.

(1) Master

All the delay layers defined within a SecuriLan are assigned to a particular SCP/MIC711, which synchronizes them and is referred to as the Master.



(2) Behaviour when Master fails

Assume secure position: If the Master fails, all the delay layers are automatically switched to the "Night" state until the connection to the Master is restored.

Remain operable: If the Master fails, all the delay layers remain locally operable, i.e. only on their own SCP. Automatic switchover still takes place. Once the connection to the Master is restored, all the delay layers are automatically synchronized.

2.3.8 Saving faults

Physical view, logical view

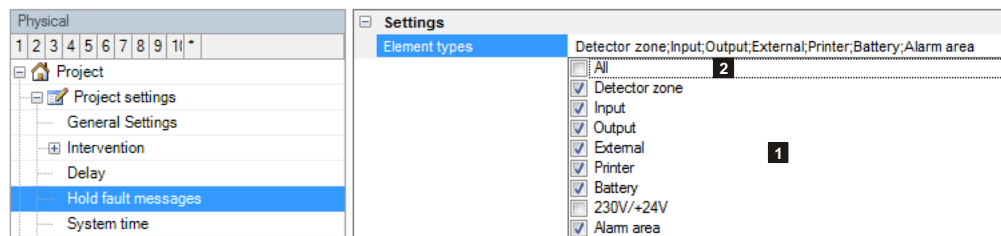
In the event of an element fault it is possible to plan for the fault message triggered as a result to be stored in the fire alarm control panel. Once the fault has been rectified, the corresponding fault message must be reset manually on the control panel of the fire alarm control panel. The setting also affects any existing actuations.

(1) Element types

Selects the element types for this function.

(2) All

This setting relates only to the elements displayed in the selection field.



2.3.9 System time

Physical view, logical view

The control panel can switch over automatically between summer time and standard time.

(1) Master

Selects the SCP/MIC711 whose date and time is to be used for all the other control panels.

(2) Summer time switching

This setting can be activated and deactivated.

(3) Begin of summer time

Defines the point in time for the switchover to summer time

(4) End of summer time

Defines the point in time for the switchover to standard time

Physical	
1	2
3	4
5	6
7	8
9	10
11	*
Project	
Project settings	
General Settings	
Intervention	
Delay	
Hold fault messages	
System time	
Automatic disconnection	
Event memory	
Emergency mode	
Remote access	
Connections SecuriLan	
RS485(1)	
RS485(2)	

Settings	
Master	1 SCP 2000(1)
Summer time switching	2 <input checked="" type="checkbox"/>
Begin of summer time 3	
Month	March
Day of the week	Sunday
from hour	2
to hour	3
starting day earliest	25
starting day latest	31
End of summer time 4	
Month	October
Day of the week	Sunday
from hour	3
to hour	2
ends not before the day	25
ends before the day	31

2.3.10 Automatic disconnection

Physical view, logical view

A time window is started after a group alarm reset or if an alarm is pending from one or more detection zones. If a new alarm occurs from one of the previous detection zones within that time window, the detection zone in question is automatically deactivated. After a renewed group alarm reset all the automatically deactivated detection zones are switched back on again. The detection zones can also be switched back on again manually.

(1) Can be activated via

The automatic disablement can be triggered by a group alarm reset from the devices selected here.

At least 1 system must be selected; otherwise automatic disablement is not started.

Physical	
1	2
3	4
5	6
7	8
9	10
11	*
Project	
Project settings	
General Settings	
Intervention	
Delay	
Hold fault messages	
System time	
Automatic disconnection	

Settings	
Can be activated via	1 Control panel ;Fire brigade panel;
Activation period	2 00:30:00

(2) Activation period

Time window [1.00 s to 18.00 h].

2.3.11 Event memory

Physical view, logical view]

The SecuriFire system has an event memory in which the last 200 events are continually stored in a non-volatile way (65,000 events with SD Card). The memory contents can be output on any main indication and control map and on any printer within the SecuriLan. The "SystemInformation" SecuriFire Tool also provides access to the memory with the possibility of storage as a data file for subsequent editing.

The SecuriFire system also comprises a trigger memory. The trigger memory (max. 200 events) creates a copy of the event memory and locks itself for up to 1,080 hours. This means it is possible to retrace the trigger of the fault or alarm even long after the event. A trigger condition has to be defined in order to activate the trigger memory.

Filter for incoming messages - event memory and trigger memory			
Range filters		1	
Message filters		2	
Trigger memory settings			
Trigger criterion		3	Alarm general
Number of events after trigger		4	100
Trigger block time [minutes]		5	2880
Number of events on extended event memory [x1000]		6	65

(1) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(2) Message filters

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(3) Trigger criterion

Start condition for the trigger memory. Allows the required data to be specifically entered (e.g. alarm or fault). The trigger criterion is specified in a Boolean function. The default trigger is to group alarm or group fault.

(4) Number of events after trigger

If the trigger event occurs, a fixed number of 200 events are recorded to the trigger memory. This parameter is used to determine how many events are entered after the trigger point; the remaining number of events relates to the point in time before the trigger.

Example: entry 50. 150 events preceding and 50 events following the trigger event are stored.

(5) Trigger block time [minutes]

The trigger memory stores the data for the amount of time specified here. A new event can only be copied to the trigger memory once this time has elapsed. If the trigger block time was reset via the SystemInformation tool, the memory is available immediately.

(6) Number of events on extended event memory [x1000]

Valid for all devices with SD memory card.

2.3.12 Emergency mode

[Physical view, logical view]

If the control panel detects errors and restarts as a result, it is assumed that there is a problem in the control panel. If this occurs often within a set period of time (default = 3x within 24 hours), the planned functions are deactivated. The control panel is to use as few functions as possible in order to still enable operations.

A number of country-specific requirements demand this function.

(1) Software redundancy active

Activates/deactivates the functionality

(2) Allowed restarts

Used to plan the number of system restarts within a given time interval after which the control panel should be switched over to emergency mode.

Physical	
1	2
3	4
5	6
7	8
9	10
11	*

Settings	
Software redundancy active	<input checked="" type="checkbox"/>
allowed restarts	3
Time span	24:00:00
Disable Keep element states	<input checked="" type="checkbox"/>
Control panel restriction	Completely
Lock fire brigade panel	<input checked="" type="checkbox"/>
Disable indicators	<input checked="" type="checkbox"/>
Disable day-night	<input checked="" type="checkbox"/>
Disable voltage checks	<input checked="" type="checkbox"/>
Disable remote access	<input checked="" type="checkbox"/>
Disable VirtualMIC	<input checked="" type="checkbox"/>
Disable maintenance requests	<input checked="" type="checkbox"/>
Disable self checks	<input checked="" type="checkbox"/>
Disable module failures	<input checked="" type="checkbox"/>
Disable central download	<input checked="" type="checkbox"/>
Disable SD card	<input checked="" type="checkbox"/>

(3) Time span

Used to plan the interval of time that determines the occurrence of restarts.

Example: If 3 system restarts occur within 24 hours, the system switches over to emergency mode.

(4) Functions deactivated in emergency mode

Used to plan which functions are to be deactivated in the event of the system's emergency mode.



Notice

The "Lock fire brigade panel" function should never be deactivated.

Software redundancy should also be activated via the ServiceCenter tool; otherwise a module fault will be displayed on the control panel.

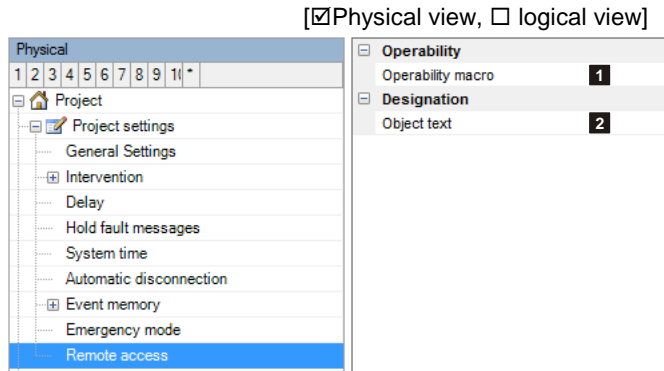
2.3.13 Remote access

(1) Operability macro

The operability of this element can be restricted using the operability macro.

(2) Object texts

This object can be assigned 3 lines of text and one info text for the indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.



2.3.14 Element filter ModBus interface

(1) Element types

Element types where the checkbox is activated are not displayed on the ModBus register.

(2) Version ModBus mapping

Shows the current ModBus mapping version.

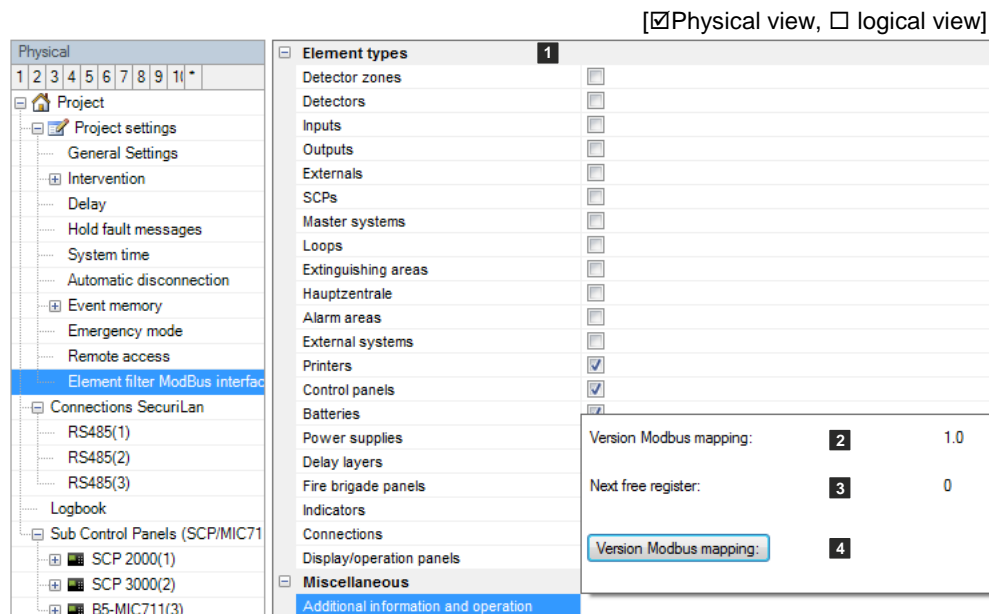
(3) Next free register

Shows the number of the next free ModBus register.

(4) New mapping

A new mapping can be carried out here. The “Version ModBus mapping (2)” is then incremented.

Attention: The mapping can be changed by carrying out this action. This means that elements can then no longer be accessed under the same register number as before the action. This can cause problems when a management system is connected.



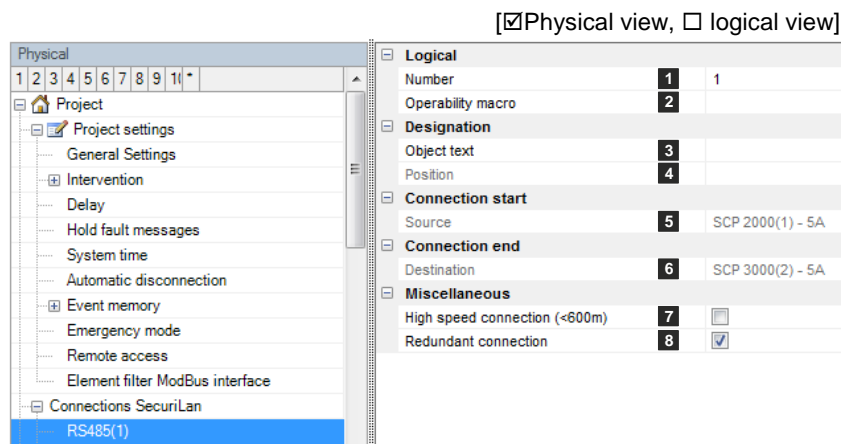
2.3.15 SecuriLan connections

(1) Number

Unique number of the logical system object.
Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.



(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Source, (6) Destination

Displays the control panel ports via which the connection is established. The hardware connection must be laid out exactly as displayed here. The settings cannot be changed.

(7) High speed connection (<600m) [For RS485 connections only]

The transmission speed can be doubled for connections of less than 600 m.

(8) Redundant connection [For RS485 connections only]

If this option is selected, the connection must be laid out as redundant.

Possible connection types:



Line length between 2 control panels: max. 1200m

Transmission speeds:

- 625kbit/s: High-speed connection and redundant connection
- 1.25Mbit/s: High-speed connection and redundant connection
- 2.5Mbit/s: High-speed connection and redundant connection



Line length between 2 control panels: max. 100m

Transmission speed: 100Mbit/s fixed



Line length between 2 control panels: max. 100m

Transmission speed: 10/100Mbit/s automatic

FXM / FXS connection



Line length between 2 control panels: FXM (multimode) max. 2km, FXS (single mode) max. 10km,
Transmission speed: 100Mbit/s max.

2.3.16 Logbook

Physical view, logical view

The modified settings are logged in the Logbook. The Logbook is activated after the first project planning download. The following information is logged: Date/time, project version, change and user. Only the last 100 entries are saved.

Physical	Time stamp	Version	Description	User
1 2 3 4 5 6 7 8 9 10 *	06.10.2011 08:08	80	value changed Fallback time [MIC 1] from '00:00:15' to '00:01:00'	Daniel...
Project	13.10.2011 16:17	80	Projection successfully downloaded to SCP 1	Daniel...
Project settings	13.10.2011 16:18	81	Loop configuration successfully downloaded to SCP 1	Daniel...
General Settings	13.10.2011 16:19	82	Object texts successfully downloaded to SCP 1	Daniel...
Intervention	12.10.2011 16:44	83	value new Input [B6-BAF with rel 5] from '' to 'Input 2'	Daniel...
Delay	13.10.2011 07:53	83	value new Output 1 [B6-BAF with rel 5] from '' to 'Output 3'	Daniel...
Hold fault messages	13.10.2011 07:55	83	Loop configuration successfully downloaded to SCP 1	Daniel...
System time	13.10.2011 07:56	84	Object texts successfully downloaded to SCP 1	Daniel...
Automatic disconnection	13.10.2011 15:43	85	value changed Message at warm-start [General Settings] from 'False' to 'True'	Daniel...
Event memory	13.10.2011 15:44	85	value changed Start inspection when button BUZZER RESET is pressed [General Settings] fr...	Daniel...
Emergency mode	13.10.2011 15:44	85	value changed Start inspection when button ALARM UNITS RESET is pressed [General Setti...	Daniel...
Remote access	13.10.2011 15:44	85	value changed Display leading zeros [General Settings] from 'False' to 'True'	Daniel...
Connections SecuriLan	13.10.2011 15:47	85	Projection successfully downloaded to SCP 1	Daniel...
RS485(1)	13.10.2011 16:13	86	value changed Digits element-number [General Settings] from '5' to '4'	Daniel...
RS485(2)	13.10.2011 16:15	86	value deleted Output 1 [B6-BAF with rel 5] from 'Output 3' to ''	Daniel...
RS485(3)	13.10.2011 16:42	86	value changed Separator for element number [General Settings] from '{/}' to '{:}'	Daniel...
Logbook	13.10.2011 16:45	86	Projection successfully downloaded to SCP 1	Daniel...
Sub Control Panels (SCP/MIC711)	13.10.2011 16:55	87	value changed Separator for element number [General Settings] from '{:}' to '{/}'	Daniel...
SCP 2000(1)				
SCP 3000(2)				
B5-MIC711(3)				

2.4 Components fitted to the control panels

2.4.1 Sub-control panels (SCP/MIC711)

[Physical view, logical view]

This Chapter describes all the settings for the hardware components available during the programming of the control panel or MIC711.

(1) Hardware type

Lists the control panel types/MIC711 as planned in the step "2.3.2 Project".

(2) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(3) Name

User-definable text used for identifying the element.

(4) IP address, (5) Subnet mask, (6) Gateway address

If the option "Settings individually per SCU/MIC711" was selected under "2.3.4 ", the corresponding entries can be made here.

Otherwise the settings are assigned by SecuriFire Studio, in accordance with the template under "2.3.4 ".

(7) Top bar display MIC/FIP

This text is shown in the top bar of the display. It can be up to 16 characters long.

(8) Quiescent state display MIC/FIP

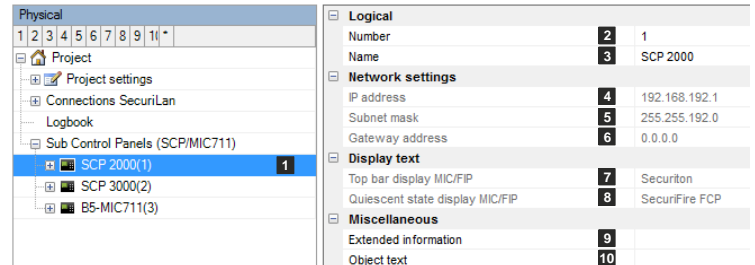
This text appears in the middle of the display in the system's normal state.

(7) Extended information

Field for user-definable text as information for the project manager.

(8) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.



2.4.2 Battery

[Physical view, logical view]

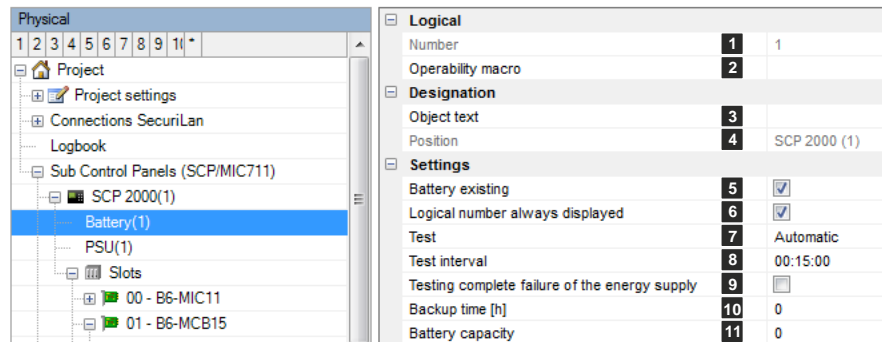
The emergency power batteries can be configured individually for each SCP.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.



(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Battery existing

Must always be activated if batteries are used to bridge failures in the mains power supply.

(6) Logical number always displayed

Option set (default setting): The number of the "Battery" element is displayed on the MIC.

Option not set (not recommended): The number of the "Battery" element is not displayed on the MIC.

(7) Test, (8) Test interval

Default setting: Test: automatic, Test interval: 15 min. No other settings are permitted.

(9) Testing complete failure of the energy supply

The battery voltage is monitored in the event of a mains outage. The batteries are disconnected if a critical lower limit is reached (approx. 22.6V) to prevent the batteries from reaching a low-charge state.

Option set: A "Battery fault" is signalled shortly before the batteries are disconnected (=total failure).

Option not set: No "Battery fault" message is signalled.

(10) Backup time [h]

This value is loaded in the control panel and is used there for the function „BATTERY CURRENT MEASUREMENT“ via MIC.

(11) Battery capacity [Ah]

This value is loaded in the control panel and is used there for the function „BATTERY CURRENT MEASUREMENT“ via MIC.

2.4.3 PSU

Physical view, logical view

The power supply units can be configured individually for each SCP.

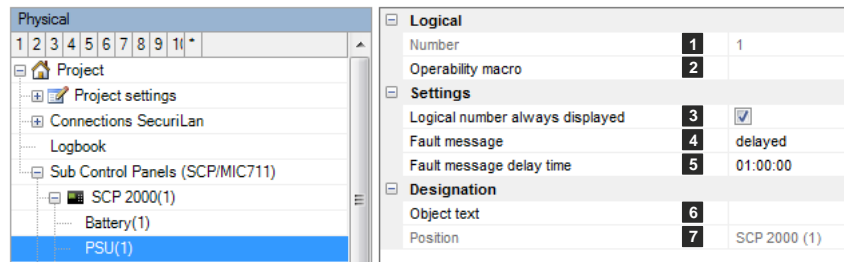
(1) Number

Unique number of the logical system object.

Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.



Physical		Logical	
1	2	Number	1
3	4	Operability macro	2
5	6	Settings	
7	8	Logical number always displayed	3 <input checked="" type="checkbox"/>
9	10	Fault message	4 delayed
*		Fault message delay time	5 01:00:00
		Designation	
		Object text	6
		Position	7 SCP 2000 (1)

(3) Logical number always displayed

Option set (default setting): The number of the "230V/+24V" element is displayed on the MIC.

Option not set (not recommended): The number of the "230V/+24V" element is not displayed on the MIC.

(4) Fault message, (5) Fault message delay time

The mains outage is signalled, either: without delay, never, delayed

Default setting: delayed, 1 hour

(6) Object texts

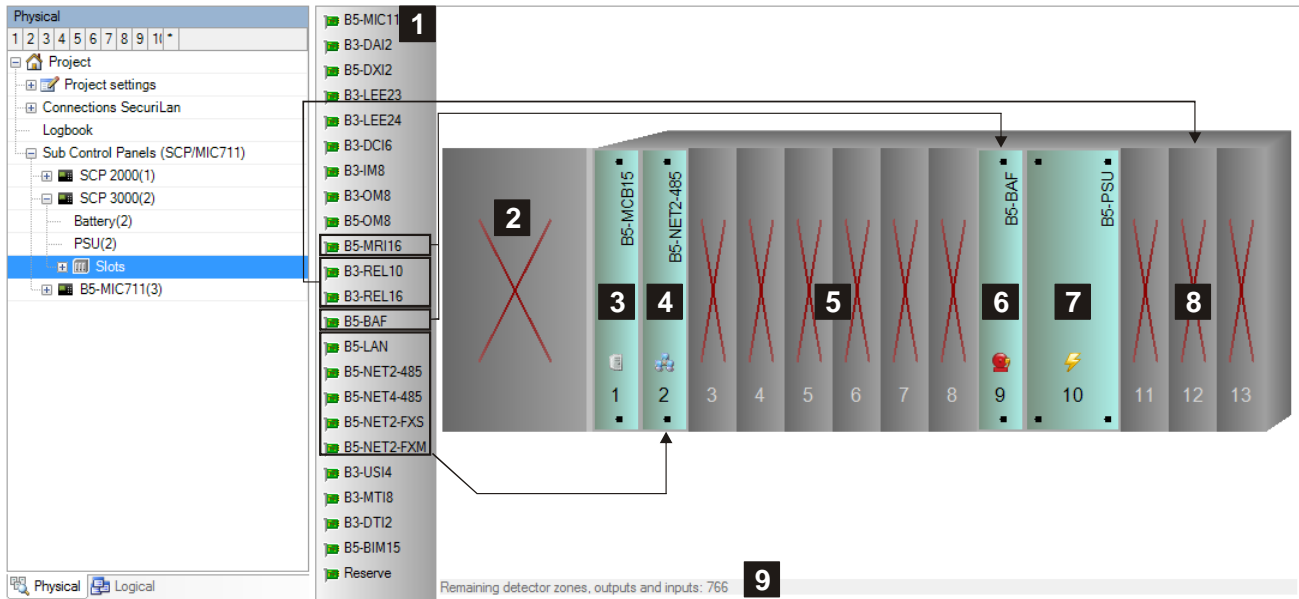
This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(7) Position

Unique reference to the hardware topology.

2.4.4 SCP3000 Slot Editor

Physical view, logical view



(1) Boards

Lets you select the MIC and the boards available for equipping the control panel. The graphic indicates the mandatory and preferred slots for specific boards. The remaining boards can be fitted at random to slots (2)3-9.

(2) B5-MIC11

A B5-MIC11 can be fitted here as an option.

(3) Slot 1

The B5-MCB15 board is fitted here permanently.

(4) Slot 2

If a network board (B5-NET2-485, B5-NET4-485, B5-NET2-FXM, B5-NET2-FXS, B5-LAN) is required, it must be fitted to this slot here.

Tip: If no network board is currently required, keep this slot free as a "Reserve" for any subsequent fitting.

(5) Slots 2 to 9

General slots; can be randomly fitted with boards as required. See notes on slots 2 and 9.

(6) Slot 9

Relay board slots 11-13 are available only if B5-BAF or B5-MRI16 is fitted.

(7) Slot 10

The B5-PSU board is fitted here permanently.

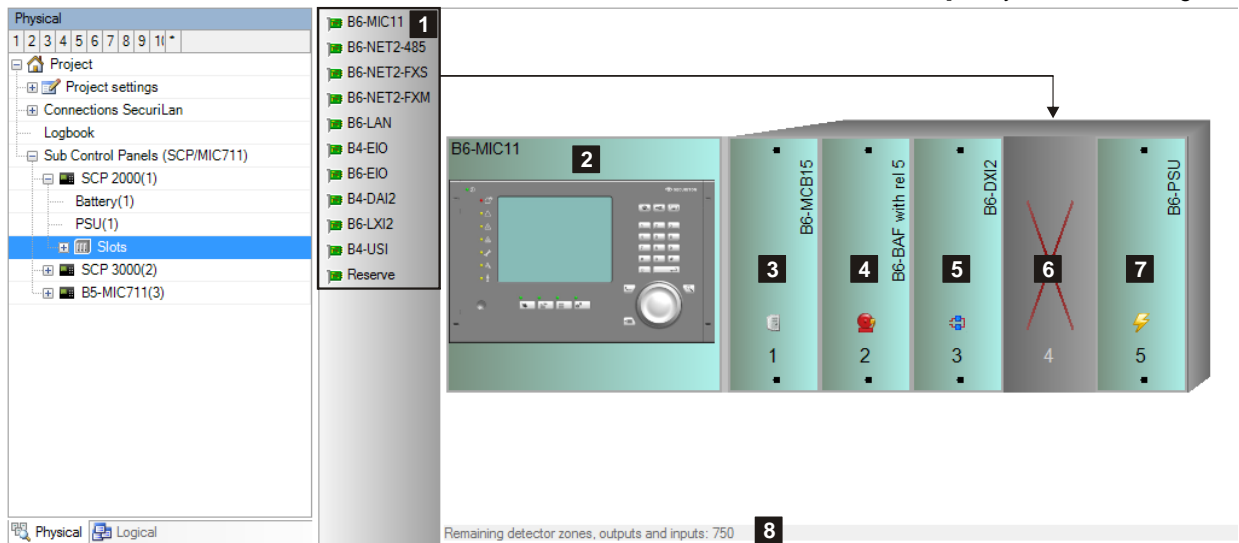
(8) Slots 11 to 13

Slots for relay boards B3-REL10 or B3-REL16(E).

(9) Resource display

Indicates how many detection zones, outputs and inputs are still available on this SCP.

2.4.5 SCP2000 Unit Editor

[Physical view, logical view]**(1) Units**

Lets you select the MIC and one of the available units for equipping the control panel.

(2) B6-MIC11

A B6-MIC11 can be fitted here as an option.

(3) B6-MCB15, (4) B6-BAF, (5) B6-DXI2, (7) B6-PSU

These (virtual) units are permanent and part of the basic configuration.

(6) Slot 4

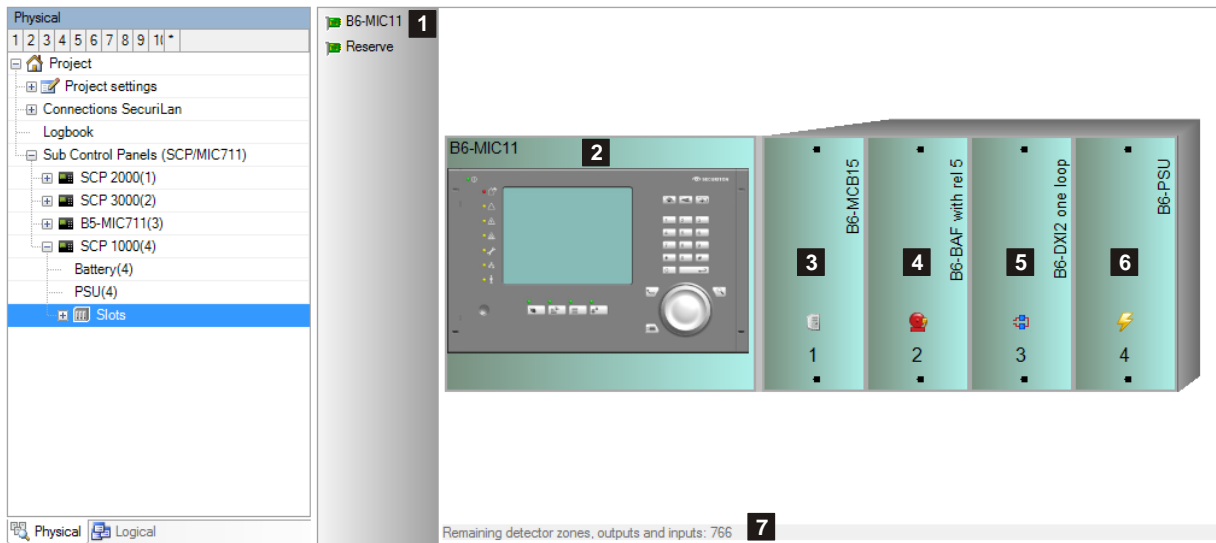
One of the available units can be fitted here.

(8) Resource display

Indicates how many detection zones, outputs and inputs are still available on this SCP.

2.4.6 SCP1000 Unit Editor

Physical view, logical view



(1) Units

Choice available for fitting:

(2) B6-MIC11

A B6-MIC711 can be fitted here as an option.

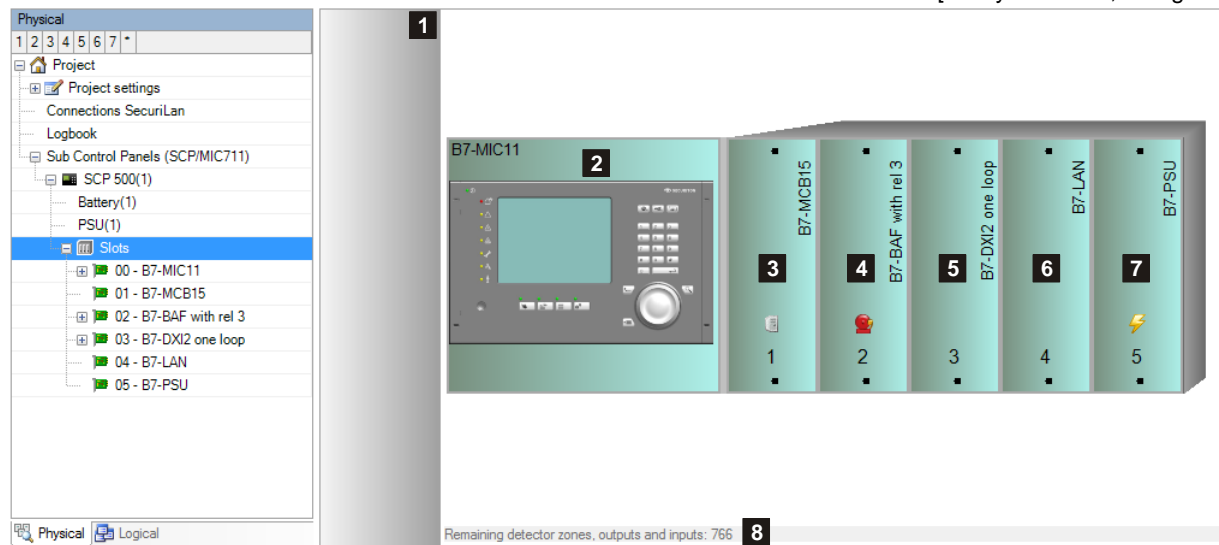
(3) B6-MCB15, (4) B6-BAF, (5) B6-DXI2, (6) B6-PSU

These (virtual) units are permanent and part of the basic configuration.

(7) Resource display

Indicates how many detection zones, outputs and inputs are still available on this SCP.

2.4.7 SCP500 Unit Editor

[Physical view, logical view]**(1) Units**

The SCP500 does not provide any options for fitting.

(2) B7-MIC11

The B7-MIC711 is permanent and part of the basic configuration.

(3) B7-MCB15, (4) B7-BAF, (5) B7-DXI1, (6) B7-LAN, (7) B7-PSU

These (virtual) units are permanent and part of the basic configuration.

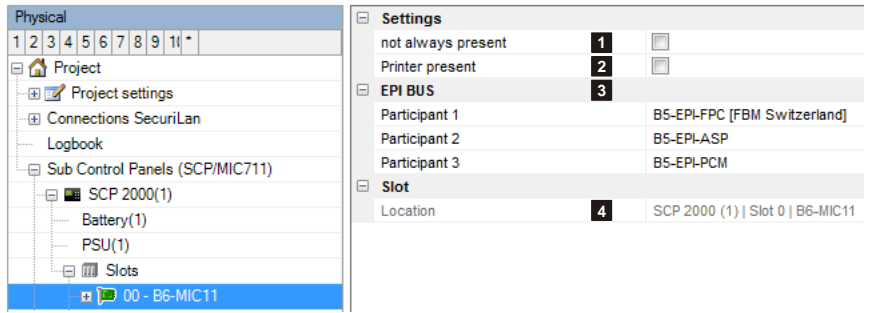
(8) Resource display

Indicates how many detection zones, outputs and inputs are still available on this SCP.

2.4.8 B5-MIC11/B6-MIC11/B7-MIC11/B5-MIC711/B6-MIC711

(1) MIC11 not always present

The "not always present" option is available for the following devices: MIC11 and MMI bus participants. If the option is set, whenever SecuriFire is initialised, it checks whether the corresponding device is fitted.



If it is fitted, the device operates as normal. However, in neither case is there a fault message. This function is useful during the commissioning phase if and when devices are not fitted.

It is imperative to deactivate the "not always present" option before the final commissioning.

(2) Printer present

This setting refers to the Integrated Log Printer connected to the MIC11.

(3) EPI Bus Participant x

The devices MIC11/ MIC711 as well as MMI-FIP and B5-MMI-IPS have an EPI bus base interface. Up to 3 additional, non-redundant indication and control maps can be connected to the bus; they must be fitted in the immediate vicinity (max. line length 1m). EPI devices available: B5-EPI-ASP, B5-EPI-FPC, B5-EPI-PCM, B5-EPI-PIM, B5-EPI-FPD, B5-EPI-FAT, B5-EPI-FPS, B5-EPI-FPCZ.

Notice: Each EPI device occupies 1 address on the MMI bus. One of three possible EPI-BUS addresses is set using the hex coding switch on the device.

(4) Position

Unique reference to the hardware topology.

[Physical view, logical view]

The screenshot displays the SecuriFire Studio interface. On the left, the 'Physical' view shows a hierarchical tree structure of the system components. The 'Logical' view on the right shows a detailed configuration table for a specific object.

Physical		Logical	
1	Project	Number	1
2	Project settings	Designation	
3	Connections SecuriLan	Object text	2
4	Logbook	Position	3 SCP 2000 (1) Steckplatz 0 B6-MIC11
5	Sub Control Panels (SCP/MIC711)	Authorities	
6	SCP 2000(1)	User group	4 Installer_Level_8;User_Level_4;User_L
7	Battery(1)	Menu definition	5 MicMenuDefinition_1
8	PSU(1)	Activation of macro 2	6
9	Slots	Authorisation macro 1	7 Authorisation_1
10	00 - B6-MIC11	Authorisation macro 2	8 Authorisation_2
11	MIC(1)	Check only on user level change	9 <input type="checkbox"/>
12	01 - B6-MCB15	Boolean function key switch	10 <input type="checkbox"/>
13	02 - B6-BAF with rel 5	Timing	
14	03 - B6-DXI2	Fallback time	11 00:01:00
15	04 - B6-NET2-485	Access code timeout time	12 00:10:00
16	05 - B6-PSU	Range filter	
17	SCP 3000(2)	Operability macro range filter	13
18	B5-MIC711(3)	Range filters	14
		Message filter	
		Message filter	15
		Settings	
		Transmission unit [Output]	16 1
		Alarm unit [Output]	17 2
		Alarm unit [Alarm area]	18
		Language on display	19 German
		Local alarm counter	20 <input type="checkbox"/>
		Siren reset (when button BUZZER RESET is pressed)	21 <input type="checkbox"/>
		Buzzer reset of ALL operating panels (when button BUZZER RESET is pressed)	22 <input checked="" type="checkbox"/>
		Buzzer reset (when button ALARM UNITS RESET is pressed)	23 <input checked="" type="checkbox"/>
		DIN texts	24 <input checked="" type="checkbox"/>
		Display backlight on event	25 <input checked="" type="checkbox"/>
		Fire alarm LED on maintenance alarm	26 <input type="checkbox"/>
		Acoustic	
		Operability acoustic	27
		Boolean function alarm acoustic	28
		Boolean function fault acoustic	29

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) User group

Assigns 1 ... n users for access to this indication and control map.

(5) Menu definition

Assigns a menu structure to this indication and control map.

(6) Activation of macro 2

Assigns an existing or a new Boolean function. If the Boolean function is active, macro 2 is used; if it is inactive, macro 1 is used.

(7) Authorisation macro 1**(8) Authorisation macro 2**

Assigns an existing or a new authorisation macro.

An authorisation macro indicates which logical elements (e.g. detection zones, outputs, etc.) and which logical commands (e.g. switch on, switch off, reset, etc.) are visible and can be operated at the various authorisation levels.

(9) Check only on user level change

If this option is set, the corresponding macro 1 or macro 2 is active only if there is a change of access level.

(10) Boolean function key switch

When the Boolean function changes state from 0 to 1, a switch is made to authorisation level 2.

When the Boolean function changes state from 1 to 0, a switch is made to authorisation level 1.

Please note: This function takes priority over any user who may be logged on!

(11) Fallback time

Time for the automatic switch to the basic display after the last key is pressed.

(12) Access code timeout time

Switches automatically to authorisation level 1 once the set time (1 min-12 h) has elapsed without a key being pressed.

(13) Operability macro range filter

The operability of this element can be restricted using the operability macro.

(14) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(15) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(16) Transmission unit [Output]

Assigns the output (log. number) of the transmission unit for the display and operation on this indication and control map.

(17) Alarm unit [Output] / (18) Alarm unit [Alarm area]

Either: Assigns the output (log. number) of the alarm unit for the display and operation on this indication and control map.

Or: Assigns the alarm area (log. number) of the alarm unit for the display and operation on this indication and control map

(see also Chap. 2.7.14 Alarm area).

(19) Language on display

Default language for this indication and control map. If planned, up to 3 other languages can be displayed temporarily.

(20) Local alarm counter

Counts the alarms of the current control panel exclusively.

(21) Siren reset (when button BUZZER RESET is pressed)

If this option is set, pressing the "BUZZER RESET" button will also reset the sirens.

(22) Buzzer reset of ALL operating panels (when button BUZZER RESET is pressed)

If this option is set, pressing the "BUZZER RESET" button will reset the acoustic on all the control panels.

(23) Buzzer reset (when button ALARM UNITS RESET is pressed)

If this option is set, pressing the "Alarm units reset" button will reset the buzzer.

(24) DIN texts

This option has no effect.

(25) Display backlight on event

Automatically lights up the display when a message is received.

(26) Fire alarm LED on maintenance alarm

If this option is set, the fire alarm LED is activated in the event of a maintenance alarm. However the maintenance has to be started using this control panel. If the maintenance is started via the ServiceCenter, the fire alarm LED on maintenance alarm has no function.

(27) Operability acoustic

The operability of this element can be restricted using the operability macro.

(28) Boolean function alarm acoustic

If the Boolean function is true, the alarm tone will sound on this device.

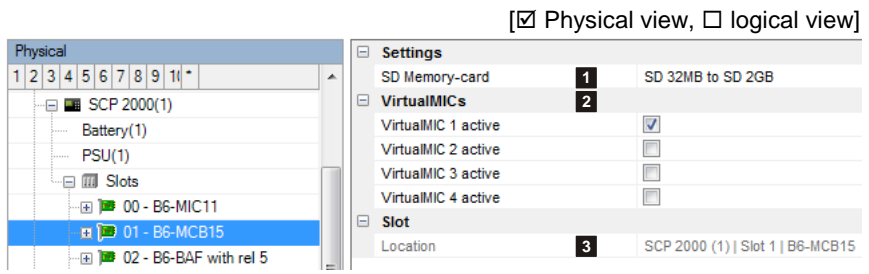
(29) Boolean function fault acoustic

If the Boolean function is true, the fault tone will sound on this device.

2.4.9 B5-MCB15/B6-MCB15/B7-MCB15

(1) SD memory card

The Bx-MCB15 can be fitted with a commercially available memory card as an option. The types "SD card" and "MMC card" are supported. "SDHC" cards are not supported!



The memory capacity supported is 32MB to 2GB maximum. When the control panel powers up a plausibility check is carried out to ensure that the storage requirements of the planned functions do not exceed the storage capacity of the SD card. If the storage capacity of the SD card is insufficient, an error message will be displayed (module fault).

If several SCPs in the same SecuriLan are fitted with SD cards, they are operated redundantly.

The event memory of the Bx-MCB15 is expanded as a result from 200 entries to 65,000 entries. The expanded event memory must be enabled (see 2.3.11)

Event memory).

(2) VirtualMICs

If remote access via a VirtualMIC is required, it must be enabled here.

VirtualMIC is a PC software that replicates a SecuriFire MIC. The display and operation of a real MIC can also be carried out via the software interface of the VirtualMIC.

Notice: Each VirtualMIC occupies a logical address of the type Indication and Control Map; this in return reduces the connection options for physical indication and control maps by one device.

(3) Position

Unique reference to the hardware topology.

2.4.10 Bx-LAN, Bx-NET2-485, B5-NET4-485, Bx-NET2-FXM, Bx-NET2-FXS

(1) Comment (for Bx-LAN only)

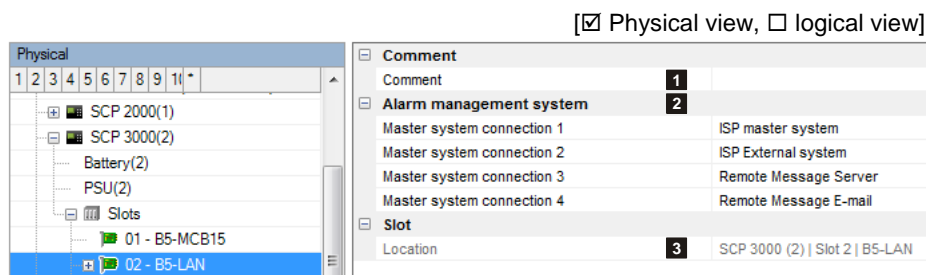
Field for user-definable text as information for the project manager.

(2) Alarm management system

Up to four alarm management systems/external systems can be connected to one network board. The required type is selected here.

(3) Position

Unique reference to the hardware topology.



2.4.11 Bx-DXI2, B6-DXI2, B6-LXI2, B4-DAI2, B3-DAI2, B7-DXI

Physical view, logical view

(1) Comment (for B6-LXI2 only)

Up to four alarm management systems/external systems can be connected to one network board. The required type is selected here.

(2) Logical objects

You have the possibility of planning the topology in which the connection is to be operated: inactive, stub or loop

The screenshot shows the SecuriFire Studio interface. On the left is the 'Physical' view showing a tree structure of components: Project, Project settings, Connections SecuriLan, Logbook, Sub Control Panels (SCP/MIC711), SCP 2000(1), Battery(1), PSU(1), and Slots. Slot 04 - B6-LXI2 is highlighted. On the right is the 'Logical view' showing configuration for the selected slot. It includes sections for Alarm management system (connections 1-4), Logical objects (Line 1-4), Blink times (Active/Passive), Settings (Alarm area, Time of activation indicator, Spontaneous analog value transmission), and Slot (Location).

Section	Item	Value
Alarm management system	Master system connection 1	ISP master system
	Master system connection 2	ISP External system
	Master system connection 3	Remote Message Server
	Master system connection 4	Remote Message E-mail
Logical objects	Line 1	Loop
	Line 2	Inactive
	Line 3	Inactive
	Line 4	Inactive
Blink times	Active/Passive [hh:mm:ss]	Frequency 1: 00:00:00/00:00:00,
Settings	Alarm area	
	Time of activation indicator on maintenance alarm	00:00:10
	Spontaneous analog value transmission	Smoke [%] 0 (+/- 4), Temperature
Slot	Location	SCP 2000 (1) Slot 4 B6-LXI2

(3) Blink times

You can define 2 separate blink times with an impulse and a pause ranging between 1 s and 15.50 min.

The blink times can later be assigned to activate elements of the board/unit under "Actuation behaviour/signal type".

(4) Alarm area

Lets you create alarm areas which are then available to loop devices on this board/unit. The alarm areas are assigned to the PI outputs of loop devices at the "Loop configuration" planning stage (see also Chap. 2.7.14 Alarm area).

(5) Time of indicator activation on detector-check (Text in Studio is not correct!)

Using the function "Detector zone - Check" in the tool Service Center", this time is used to activate the detector indicator.

(6) Spontaneous analog value transmission

Analogue values are transmitted spontaneously if a detector's current value deviates from the "idle value" by n*"difference"! (n=1,2,3,...). A new value is then only transmitted again if it differs from the old one.

The "difference" from the "idle value" for the various characteristics can be specified here.

(7) Position

Unique reference to the hardware topology.

2.4.12 B3-IM8

(1) Lines 1 to 8

The lines can be configured individually as required.

[Physical view, logical view]

Line	Configuration
Line 1	Monitored input 26K7
Line 2	SecuriStar 521/523/563, with pre-alarm
Line 3	SecuriStar 521/523/563, MCP, without pre-alarm
Line 4	Inactive
Line 5	Inactive
Line 6	Inactive
Line 7	Inactive
Line 8	Inactive

Slot	Configuration
Slot 2	SCP 3000 (2) Slot 3 B3-IM8

The possibilities available are as follows:

- Inactive
- Input monitors 26K7
- VdS interface
- Input DFG-60 BLK3
- Valve monitoring
- Input monitors 3K
- Series 130/A with pre-alarm
- Series 130 Ex-i
- SecuriStar 521 / 523 / 563, with pre-alarm
- Series 130A, MCP, without pre-alarm
- SecuriStar 521 / 523 / 563, MCP, without pre-alarm
- SLR-E-IS
- DCD-1E-IS
- Sabotage line
- Series 130/52x ARE (ADW, RAS, ERM)

Using the types in the first column automatically generates a logical input; the types of columns 2 and 3, a detection zone.

(2) Position

Unique reference to the hardware topology.

2.4.13 B5-OM8, B3-OM8

(1) Output 1 to output 8

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

[Physical view, logical view]

Output	Configuration
Output 1	8
Output 2	
Output 3	
Output 4	
Output 5	
Output 6	
Output 7	
Output 8	

Settings	Configuration
Service function activatable (Service Pin)	<input checked="" type="checkbox"/>
Blink times	Active/Passive [hh:mm:ss] Frequency 1: 00:00:01/00:00:01, Frequency
Slot	Slot 4
Location	SCP 3000 (2) Slot 7 B3-OM8

(2) Service function activatable (Service Pin) (for B3-OM8 only)

Option set: the service pin function is enabled

Option not set: the service pin is ignored

Removing the service pin:

- on the B3-OM8 causes the outputs OM1 - OM8 to become quiescent
- via the ServiceCenter (electronic service pin) causes all the outputs on the B3-BAF, B5-BAF and B3-OM8 to become quiescent.

The bistable relays on boards B5-MR116, B3-REL10, B3-REL16, B3-REL16E and loop modules BA-REL4, BA-OI3 and BA-IOM are frozen in their momentary state.

The physical state of the outputs is re-adjusted to the logical state only once the service pin is inserted. This allows logic tests to be carried out to check fire incident controls; the service pin also protects against unintentional triggers during maintenance work.

(3) Impulse/pause

Indication of the times for impulse and pause for intermittent actuation.

(4) Position

Unique reference to the hardware topology.

2.4.14 B5-BAF, B6-BAF

Physical view, logical view

The Bx-BAF board/unit (Basic Functions) comprises the following main functions:

- Connection of a fire brigade map compliant with DIN 14661
- Connection of a transmission unit
- Connection of an alarm unit (main siren)
- 5 user-programmable bistable 24 V / 3 A relay outputs (B6-BAF only)
- 2 connections for alarm lines or monitored inputs
- Interface for the MMI bus for connecting remote MMI devices.

Category	Item	Value
Relay outputs (1)	Relay output 1	1
	Relay output 2	2
	Relay output 3	5
	Relay output 4	6
	Relay output 5	7
Outputs (2)	Output 1	8
	Output 2	9
Input 1 (3)	Behaviour	Input
	Input	1
Input 2 (3)	Behaviour	Detector zone
	Detector zone	21
	Detector number	<Entire zone>
Additional panels (MMI-Bus)	MMI device 1	4 B5-MMI-FIP
	MMI device 1 not always present	5 <input type="checkbox"/>
	MMI device 1 bus address	6 3
	MMI device 2	None
	MMI device 3	None
	MMI device 4	None
	MMI device 5	None
	MMI device 6	None
	MMI device 7	None
	MMI device 8	None
	MMI device 9	None
	MMI device 10	None
	MMI device 11	None
	MMI device 12	None
	MMI device 13	None
	MMI device 14	None
MMI device 15	None	
MMI redundant	7 <input checked="" type="checkbox"/>	
Parallel Fire Brigade Panel	Device	8 None
	Active/Passive [hh:mm:ss]	9 Frequency 1: 00:00:01/00:00:01, Frequer
Slot	Location	10 SCP 2000 (1) Slot 2 B6-BAF with rel 5

(1) Relay outputs (for B6-BAF only)

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(2) Outputs (monitored)

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(3) Input 1 and input 2

Input 1 and input 2 are used to poll galvanically isolated contacts. Input 1 is also used as a checkback contact of MDL-F. Inputs 1 and 2 can be planned as an input or detector / detection zone.

(4) MMI participants n (n=1 to 15)

Up to 15 external devices can be planned for each MMI bus, where n equals the physical address of the planned device. This physical address must later be set directly on the device using a rotary switch during installation and commissioning; the physical sequence of the devices on the MMI bus can be selected as required, regardless of the planning. Each device is assigned a logical number later on during the planning. The device is indicated and operated on the display of the fire alarm control panel using this number. Take note of the system limits with regard to the max. number of devices.

Notice: The devices IPEL and EAT64 occupy 2 addresses on the MMI bus. It is therefore not possible to plan the address following the IPEL and EAT64 respectively.

(5) not always present

The "not always present" option is available for the following devices: MIC11 and MMI bus participants. If the option is set, whenever SecuriFire is initialised, it checks whether the corresponding device is fitted.

If it is fitted, the device operates as normal. However, in neither case is there a fault message.

This function is useful during the commissioning phase if and when devices are not fitted.

It is imperative to deactivate the "not always present" option before the final commissioning.

(6) bus address

The set address on the device must match this address.

(7) MMI redundant (for B6-BAF only)

This is used to plan whether the data lines of the MMI bus are connected redundantly (A and B) or non-redundantly (only A).

The power supply must necessarily be redundant (A and B).

(8) Device

This is used to plan the type of parallel fire brigade map to be connected to the Bx-BAF. Selection: none, Ifam FBM 2001/2003, Wiesmeier FBM 0720 V7.0b, FBM CH SN054002, FBM ReGraph.

(9) Blink times

You can define 2 separate blink times with an impulse and a pause ranging between 1 s and 15.50 min.

The blink times can later be assigned to activate elements of the board/unit under "Actuation behaviour/signal type".

(10) Position

Unique reference to the hardware topology.

2.4.15 B7-BAF

Physical view, logical view

The B7-BAF board/unit (Basic Functions) comprises the following main functions:

- Connection of a transmission unit
- Connection of an alarm unit (main siren)
- 3 user-programmable bistable 24 V / 3 A relay outputs
- 2 connections for alarm lines or monitored inputs

Category	Item	Value
Relay outputs	Relay output 1	3
	Relay output 2	
	Relay output 3	
Outputs	Output 1	1
	Output 2	2
Input 1	Behaviour	Input
	Input	1
Input 2	Behaviour	Detector zone
	Detector zone	21
	Detector number	<Entire zone>
Blink times	Active/Passive [hh:mm:ss]	Frequency 1: 00:00:01/00:00:01, Frequency 2: 00:00:01/00:00:01
	Slot	
Location		SCP 500 (1) Slot 2 B7-BAF with rel 3

(1) Relay outputs 1 to 3

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(2) Outputs (monitored)

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(3) Input 1, input 2

Input 1 and input 2 are used to poll galvanically isolated contacts. Input 1 is also used as a checkback contact of MDL-F. Inputs 1 and 2 can be planned as an input or detector / detection zone.

(4) Blink times

You can define 2 separate blink times with an impulse and a pause ranging between 1 s and 15.50 min.

The blink times can later be assigned to activate elements of the board/unit under "Actuation behaviour/signal type".

(5) Position

Unique reference to the hardware topology.

2.4.16 B3-USI4/B4-USI

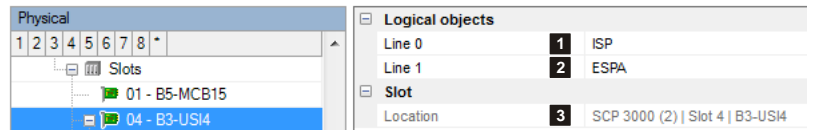
[Physical view, logical view]

The B3-USI4 board (Universal Serial Interface) comprises 2 serial interface pairs; the B4-USI unit comprises 1 serial interface pair. The interface is used to connect to management systems, remote server (SMS or E-mail), pager systems and printers. The interface type is specified later under application, either RS485, RS422 or RS232.

(1) Line 0

Selects the line's intended purpose (interface pair).

Notice: other project-specific settings can be made at a subsequent stage.



None: Interface inactive

SSP: Serial interface protocol for serial printer, SMS box, etc.

ISP: The integrated standard protocol is a proprietary protocol and is used for the connection to management systems

ModBus RTU: ModBus protocol via serial connection

ModBus TCP: ModBus protocol via TCP/IP connection

ESPA: Connection of pager systems in accordance with the ESPA 4.4.4 standard.

(2) Line 1 (for B3-USI4 only)

Selects the line's intended purpose (interface pair).

Notice: Depending on the settings under Line 0 not all the interface types and applications will be available. The restriction applies to whichever line is planned second.

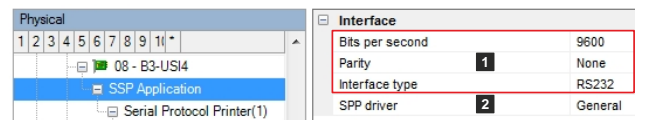
(3) Position

Unique reference to the hardware topology.

2.4.16.1 SSP application

(1) Interface

Setting of the interface parameter.



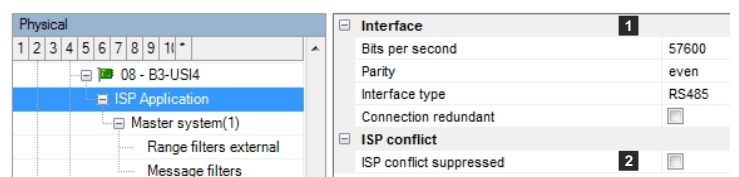
(2) SSP driver

Selection of the appropriate driver for the connected device.

2.4.16.2 ISP application

(1) Interface

Setting of the interface parameter.



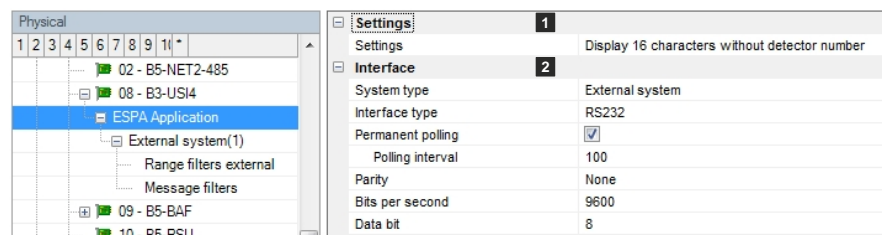
(2) ISP conflict suppressed

A fault occurs if the software version of the management system does not match the SCP. Activating this option deactivates the check of the software version between management system and control panel..

2.4.16.3 ESPA application

(1) Settings

refer to 2.7.25.1 ESPA



(2) Interface

Setting of the interface parameter.

2.4.17 B3-MT18

The B3-MT18 board (Monolog Transmission Interface 8 Lines) is used for connecting up to eight stub lines, which can be planned either as detection zones or as monitored inputs.

2.4.18 B5-MRI16

Physical view, logical view

The B5-MRI16 board includes 16 user-programmable bistable 24 V/3 A relay outputs.

(1) Outputs 1 to 16

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(2) Blink times

You can define 2 separate blink times with an impulse and a pause ranging between 1 s and 15.50 min.

The blink times can later be assigned to activate elements of the board/unit under "Actuation behaviour/signal type".

(3) Position

Unique reference to the hardware topology.

The screenshot shows the 'Physical' view of the hardware topology on the left and the 'Outputs' configuration table on the right.

Physical View (Left): A tree view showing the hardware hierarchy. The '06 - B5-MRI16' board is selected and highlighted in blue. It contains an 'Outputs' sub-entry with '1. Output(1)' and '10 - B5-PSU'.

Outputs Table (Right): A table with 16 rows for 'Output 1' through 'Output 16'. The 'Output 1' row has a value of '1' in the second column. Below the table are configuration options for 'Blink times' and 'Slot'.

Output	Logical Number
Output 1	1
Output 2	
Output 3	
Output 4	
Output 5	
Output 6	
Output 7	
Output 8	
Output 9	
Output 10	
Output 11	
Output 12	
Output 13	
Output 14	
Output 15	
Output 16	

Blink times: Active/Passive [hh:mm:ss] **2** Frequency 1: 00:00:01/00:00:01

Slot: Location **3** SCP 3000 (2) | Slot 6 | B5-MRI16

2.4.19 B3-REL10

Physical view, logical view

The B3-REL10 board comprises 10 user-programmable bistable 230 V/3 A relay outputs.

(1) Outputs 1 to 10

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(2) Position

Unique reference to the hardware topology.

The screenshot shows the 'Physical' view of the hardware topology. The tree on the left includes: Project, Project settings, Connections SecuriLan, Logbook, Sub Control Panels (SCP/MIC711), SCP 2000(1), SCP 3000(2), Battery(2), PSU(2), and Slots. The Slots list includes: 01 - B5-MCB15, 02 - B5-NET2-485, 09 - B5-BAF, 10 - B5-PSU, and 11 - B3-REL10 (highlighted). The 'Outputs' table on the right shows:

Output	Logical Number
Output 1	10
Output 2	11
Output 3	
Output 4	
Output 5	
Output 6	
Output 7	
Output 8	
Output 9	
Output 10	

The 'Slot' information at the bottom right is: Location: SCP 3000 (2) | Slot 11 | B3-REL10.

2.4.20 B3-REL16

Physical view, logical view

The B3-REL16 board comprises 16 user-programmable bistable 24 V/3 A relay outputs.

(1) Outputs 1 to 16

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(2) Position

Unique reference to the hardware topology.

The screenshot shows the 'Physical' view of the hardware topology. The tree on the left includes: Project, Project settings, Connections SecuriLan, Logbook, Sub Control Panels (SCP/MIC711), SCP 2000(1), SCP 3000(2), Battery(2), PSU(2), and Slots. The Slots list includes: 01 - B5-MCB15, 02 - B5-NET2-485, 09 - B5-BAF, 10 - B5-PSU, and 11 - B3-REL16 (highlighted). The 'Outputs' table on the right shows:

Output	Logical Number
Output 1	10
Output 2	11
Output 3	
Output 4	
Output 5	
Output 6	
Output 7	
Output 8	
Output 9	
Output 10	
Output 11	
Output 12	
Output 13	
Output 14	
Output 15	
Output 16	

The 'Slot' information at the bottom right is: Location: SCP 3000 (2) | Slot 11 | B3-REL16.

2.4.21 B3-LEE23

[Physical view, logical view]

The B3-LEE23 board supplies power to and monitors up to 8 stub lines each with a maximum of 30 detectors of the HX 140 detector series.

(1) Lines 1 to 8

Activates the required alarm lines

(2) Evaluate

for trends 1 and 2.

For the trend evaluation the threshold for trend 1 and trend 2 must be exceeded on one detector for the entire polling duration. Soiling is only displayed on the control panel once that time has elapsed. If the value falls below the threshold again before the input time has elapsed, the counter is reset and the time begins to run again from zero the next time the threshold is exceeded.

The screenshot shows the SecuriFire Studio interface. On the left, the 'Physical' view displays a tree structure of hardware components. The 'Slots' section is expanded, showing slots 01 through 10. Slot 03, labeled '03 - B3-LEE23', is selected and highlighted in blue. On the right, the 'Logical objects' view is shown. It contains several tables:

Logical objects		
Line 1		Active
Line 2		Inactive
Line 3		Inactive
Line 4		Inactive
Line 5		Inactive
Line 6		Inactive
Line 7		Inactive
Line 8		Inactive

Contamination level trend 1		
Evaluate	2	<input checked="" type="checkbox"/>
Contamination level	3	Level 1
Query time	4	00:10:00

Contamination level trend 2		
Evaluate	2	<input checked="" type="checkbox"/>
Contamination level	3	Level 2
Query time	4	12:00:00

Slot		
Location	5	SCP 3000 (2) Slot 3 B3-LEE23

(3) Contamination level

Inputs the level (1 to 4) for the soiling.

(4) Query time

A soiling message is activated once this value is exceeded. Valid input formats:

- from 10 min to 310 min in 10 min increments
- from 30 min to 930 min in 30 min increments
- from 1 h to 31 h in 1 h increments

(5) Position

Unique reference to the hardware topology.

2.4.22 B3-LEE24

[Physical view, logical view]

The B3-LEE24 board supplies power to and monitors up to 4 addressable loops each with a maximum of 127 detectors of the HX 150 detector series.

(1) Loops 1 to 4

Activates the required alarm loops

(2) Evaluate

for trends 1 and 2.

For the trend evaluation the threshold for trend 1 and trend 2 must be exceeded on one detector for the entire polling duration. Soiling is only displayed on the control panel once that time has elapsed. If the value falls below the threshold again before the input time has elapsed, the counter is reset and the time begins to run again from zero the next time the threshold is exceeded.

The screenshot shows the 'Physical' view on the left and the 'Logical objects' table on the right.

Physical View: A tree structure showing the hardware topology. The 'Slots' section is expanded to show '04 - B3-LEE24' selected.

Logical objects Table:

Object Name	Value	Status
Logical objects	1	
Loop 1		active
Loop 2		inactive
Loop 3		inactive
Loop 4		inactive
Contamination level trend 1		
Evaluate	2	<input checked="" type="checkbox"/>
Contamination level	3	Level 1
Query time	4	00:10:00
Contamination level trend 2		
Evaluate	2	<input checked="" type="checkbox"/>
Contamination level	3	Level 2
Query time	4	12:00:00
Slot		
Location	5	SCP 3000 (2) Slot 4 B3-LEE24

(3) Contamination level

Inputs the level (1 to 4) for the soiling.

(4) Query time

A soiling message is activated once this value is exceeded. Valid input formats:

- from 10 min to 310 min in 10 min increments
- from 30 min to 930 min in 30 min increments
- from 1 h to 31 h in 1 h increments

(5) Position

Unique reference to the hardware topology.

2.4.23 B3-DCI6

[Physical view, logical view]

The B3-DCI6 board supplies power to and evaluates 6 inputs, which are planned either as detection zones in direct current technology or as monitored inputs (e.g. VdS extinguishing interface, valve monitoring, etc.) using jumpers and programming.

(1) Lines 1 to 6

Line type configuration with the following choice:

- Inactive: Reserve, element does not exist
- DC line current increase: Direct current detection zone with evaluation via current increase (560 Ω alarm, 11 k Ω quiescent)
- DC line current increase + Ex9003: Direct current detection zone (560 Ω alarm, 11 k Ω quiescent) with old Ex-barrier type Ex9003
- DC line current increase + ExZ487: Direct current detection zone (560 Ω alarm, 11 k Ω quiescent) with Ex-barrier type Z487 or Z787 manufactured by Pepperl & Fuchs
- DC line current attenuation: Direct current detection zone with evaluation via current attenuation (560 Ω alarm, 11 k Ω quiescent)
- Monitored input 11K8: Monitored input with resistance values of direct current technology (560 Ω actuated, 11 k Ω quiescent)
- VdS interface: Extinguishing input in accordance with current increase principle
- Total Walther shut-off valve: Manometer shut-off valve inputs in accordance with current increase principle
- Valve monitoring: Valve monitoring inputs in accordance with current increase principle
- Monitored input 3k: Input in accordance with current increase principle

(2) Evaluate detector zone:

Address evaluation from 0...9 using various resistance values via third line (Z wire).

(3) Position

Unique reference to the hardware topology.

The screenshot displays the SecuriFire Studio interface. On the left, the 'Physical' view shows a tree structure of the hardware topology, with '03 - B3-DCI6' selected. On the right, the 'Logical objects' panel shows the configuration for the selected board. The 'Logical objects' table lists six lines with their respective configurations. The 'Settings' section shows 'Evaluate detector zone' checked. The 'Slot' section shows the location as 'SCP 3000 (2) | Slot 3 | B3-DCI6'.

Line	Configuration
Line 1	Detector line conventional
Line 2	Detector line conventional + Ex Z487
Line 3	Input monitored 3K
Line 4	Inactive
Line 5	Inactive
Line 6	Inactive

Setting	Value
Evaluate detector zone	<input checked="" type="checkbox"/>

Slot	Location
3	SCP 3000 (2) Slot 3 B3-DCI6

2.4.24 B4-EIO, B6-EIO

[Physical view, logical view]

The B6(B4)-EIO unit comprises the following main functions:

- 10 monitored inputs. Configurable as an input or detection zone.
- 8 monitored outputs.
- Constituent part of every ECP2000/FCP2000

Each of the inputs and outputs is individually configurable.

(1) Lines 1 to 10

The lines can be configured individually as required.

The possibilities available are as follows:

- Inactive
- Input monitors 26K7
- VdS interface
- Input DFG-60 BLK3
- Valve monitoring
- Input monitors 3K
- Series 130/A with pre-alarm
- Series 130 Ex-i
- SecuriStar 521 / 523 / 563, with pre-alarm
- Series 130A, MCP, without pre-alarm
- SecuriStar 521 / 523 / 563, MCP, without pre-alarm
- SLR-E-IS
- DCD-1E-IS

Using the types in the first column automatically generates a logical input; the types of columns 2 and 3, a detection zone.

(2) Lines 1 to 10 number

The number in this field is assigned to the logical element input or detection zone on this line.

Inputs/Zones		
Line 1	1	SecuriStar 521/523/563, with pre-alarm
Line 1 number	2	22
Line 2		SecuriStar 521/523/563, MCP, without pre-alarm
Line 2 number		23
Line 3		Monitored input 3K
Line 3 number		2
Line 4		Inactive
Line 4 number		
Line 5		Inactive
Line 5 number		
Line 6		Inactive
Line 6 number		
Line 7		Inactive
Line 7 number		
Line 8		Inactive
Line 8 number		
Line 9		Inactive
Line 9 number		
Line 10		Inactive
Line 10 number		
Outputs		
Output 1	3	6
Load range	4	1
Suspend adjustment after activation	5	<input type="checkbox"/>
Output 2		
Output 3		
Output 4		
Output 5		
Output 6		
Output 7		
Output 8		
EIP (integrated extinguishing indicator panel)		
Logical input no.	6	
Blink times		
Active/Passive [hh:mm:ss]	7	Frequency 1: 00:00:01/00:00:01, Frequency 2: 00:00:01/00:00:01
Slot		
Location	8	SCP 2000 (1) Slot 4 B6-EIO

(3) Outputs 1 to 8

Each of the physical outputs can be assigned a logical number (numbers 1 to 65534)

(4) Load range (B6-EIO only)

Loads between 20 Ohm and 1k Ohm can be connected. The required range of load must be set here: Range 1: 160 Ohm to 1k Ohm, Range 2: 57 Ohm to 375 Ohm, Range 3: 20 Ohm to 80 Ohm.

(5) Suspend adjustment after activation (B6-EIO only)

Option set: the output responds like a non-adjusted output for 20 minutes after the activation state has ended. Once the time period has elapsed, the original sensitivity of the fault detection is reactivated. This is needed for devices that heat up in the activation state and change their resistance as a result (e.g. relays, etc.).

Unique reference to the hardware topology.

(6) Logical input No.

If an EIP (integrated extinguishing display board) is used, the key switch must be activated here.

(7) Blink times

You can define 2 separate blink times with an impulse and a pause ranging between 1 s and 15.50 min.

The blink times can later be assigned to activate elements of the board/unit under "Actuation behaviour/signal type".

(8) Position

Unique reference to the hardware topology.

2.4.25 B3-DTI2

The B3-DTI2 unit supplies power to and monitors up to two addressable loops, each with a maximum of 128 detectors and modules from Maxima Dialogtechnik.

If required, each of the two addressable loops can be separated into two lines. In such cases a maximum of 64 participants can be connected and administered on each line.

2.4.26 B5-CSF15, B5-BIM15

[Physical view, logical view]

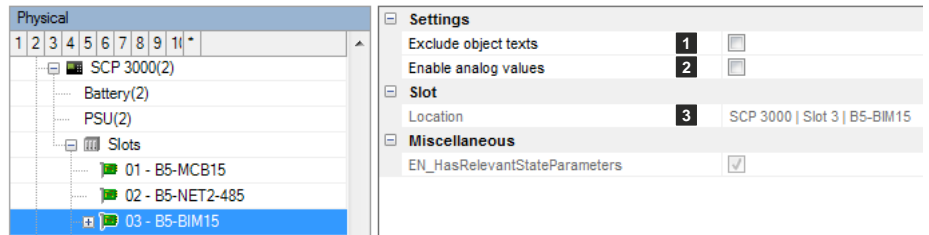
The card B5-CSF15 is used serves to integrate the control panel into a SecuriWan network.

The card B5-BIM15 is used to connect an alarm management system via BACnet/IP.

(1) Exclude object texts

If the amount of the object texts exceeds a certain level, then the SecuriFire Studio displays a warning. In this case, the object texts are excluded with this option.

The object texts must then via SecuriFire Studio function "Data Center/Export/SecuriWan(object texts)" be exported and then imported into the SecuriWan Studio (or web interface) and finally transferred to the to the CSF (or BIM).



(2) Enable analog values

The transmission of analog values is enabled or disabled here.

(3) Position

Unique reference to the hardware topology.

2.4.27 Reserve

[Physical view, logical view]

The Reserve board/unit is used to reserve a free space for subsequent expansions.

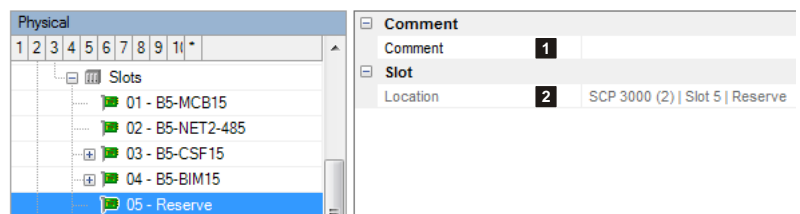
(1) Comment

Field for user-definable text as information for the project manager.

Example: "This slot (No. 2) is set aside for a B5-NET2-485, for subsequent networking."

(2) Position

Unique reference to the hardware topology.



2.5 MMI devices

Up to 15 remote MMI devices of the following types can be connected to the MMI bus interface:

B3-MMI-FPS [FBF Sweden], B3-MMI-UIO, B3-MMI-FAT [DIN14662], B3-MMI-IPS [IP Sweden], B3-MMI-IPES, B3-MMI-IPEL, B3-MMI-EAT32, B3-MMI-EAT64, B5-MMI-FIP, B5-MMI-IPS [IP Sweden].

2.5.1 B3-MMI-UIO

Physical view, logical view

The B3-MMI-UIO (universal input/output module) is used primarily for actuating layout plan and parallel indicator boards of the SecuriFire system. It can also be used as an input/output module remote from the SCP for polling potential-free contacts and buttons and for actuating non-monitored horns, lamps, relays, etc.

(1) Quantity

Number of required outputs, max.8

(2) Blink time Active/Passive [hh:mm:ss]

Indication of the times for impulse and pause for intermittent actuation.

(3) Quantity

Number of required inputs, max. 56+8

(4) Acoustic reset

Needs to be activated if one of the fields (8) Alarm acoustic or (9) Fault acoustic is activated on this module; otherwise a reset is not possible. An input is reserved for the acoustic reset as a result.

(5) Display test

Activates the indicator test (actuation of all indicators) via UIO input 2 or MIC.

(6) Logical number of 1st indicator

Indication of the logical number of the 1st indicator on this device

(7) Quantity

Number of required indicators, max. 56+8

(8) Alarm acoustic

Activates the alarm acoustic output of the B3-UIO

(9) Fault acoustic

Activates the fault acoustic output of the B3-UIO

(10) Blink time Active/Passive [hh:mm:ss]

Indication of the times for impulse and pause for intermittent actuation.

(11) Master

Specifies an MMI participant as master for the blink synchronisation for all LED outputs of the B3-UIO modules.

(12) Control panel for indication test

Specifies the MIC for activating the indicator test.

(13) Position

Unique reference to the hardware topology.

Parameter	Value
Outputs	
Quantity	1 0
Blink time Active/Passive [hh:mm:ss]	2 00:00:00/00:00:00
Inputs	
Quantity	3 30
Acoustic reset	4 <input type="radio"/> Inactive <input checked="" type="radio"/> UIO input 1
Display test	5 <input checked="" type="radio"/> Inactive <input type="radio"/> UIO input 2 <input type="radio"/> Control panel
Indicators	
Logical number of 1st indicator	6 100
Quantity	7 2
Alarm acoustic	8 <input checked="" type="checkbox"/>
Fault acoustic	9 <input checked="" type="checkbox"/>
Blink time Active/Passive [hh:mm:ss]	10 00:00:00/00:00:00
Blink synchronisation	
Master	11 <none>
MIC for test	
Control panel for indication test	12 <none>
Slot	
Location	13 SCP 2000 (1) Slot 2

2.5.2 B3-MMI-EAT32, B3-MMI-EAT64

[Physical view, logical view]

LED display panel for displaying alarm, fault and disablement states for 32 or 64 detection zones.

LED red: flashes in the event of a detection zone alarm (alarm, silent alarm and simulated alarm)

LED yellow: flashes in the event of a fault and remains steadily lit if a detection zone is disabled

(1) Logical number of 1st indicator

Indication of the logical number of the 1st indicator on this device

(2) Detection zones

Entering detection zone numbers automatically assigns the detection ones to the individual LED pairs. An individual input is possible as well as a "from x to y" input of detection zones. '-' and ',' are used as separators.

Section	Setting	Value
Settings	Logical number of 1st indicator	1 100
	Detector zones	2 1-10
Sections	Section 1	MG 1 MG 1;MG 2 MG 2;MG 3
	Section 2	3 MG 9 MG 9;MG 10 MG 10
	Section 3	
	Section 4	
Blink synchronisation	Master	4 <none>
	MIC for test	5 <none>
Blink times	Blink time Active/Passive [hh:mm:ss]	6 00:00:00.5/00:00:00.5
	Slot	7 SCP 2000 (1) Slot 2 B6-BA

(3) Sections 1 to 4 (EAT64: Sections 1 to 8)

Assistant for the automatic or manual assignment of detection zones to indicators. The texts for the device labelling strips are also specified here.

(4) Master

Specifies an MMI participant as master for the blink synchronisation for all the device LEDs.

(5) Control panel for indication test

Specifies the MIC for activating the indicator test.

(6) Blink time Active/Passive [hh:mm:ss]

Indication of the times for impulse and pause for intermittent actuation.

(7) Position

Unique reference to the hardware topology.

2.5.3 B3-MMI-IPEL, B3-MMI-IPES

Physical view, logical view

B3-MMI-IPEL: External LED indication map for 8 extinguishing areas

B3-MMI-IPES: External LED indication map for 4 extinguishing areas

Setting	Value
Logical number of 1st indicator	100
Key switch	3
Section 1	INDI 100 ;INDI 102 ;INDI 104 ;
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
Section 7	
Section 8	
Section 9	
Blink synchronisation	Master
MIC for test	<none>
Control panel for indication test	<none>
Blink times	00:00:00.5/00:00:00.5
Slot	SCP 2000 (1) Slot 2 B6-BA

(1) Logical number of 1st indicator

Indication of the logical number of the 1st indicator on this device

(2) Key switch

Indication of the log. number of the input used for the key switch.

(3) Sections 1 to 8

(IPES: Sections 1 to 4)

Section n = display extinguishing area n.

Assistant for the automatic assignment of the logical numbers to indicators. The texts for the device labelling strips are also specified here.

(4) Section 9 (IPES: Section 5)

Extinguishing system collective displays. Assistant for the automatic assignment of the logical numbers to indicators. The texts for the device labelling strips are also specified here.

(5) Master

Specifies an MMI participant as master for the blink synchronisation for all the device LEDs.

(6) Control panel for indication test

Specifies the MIC for activating the indicator test.

(7) Blink time Active/Passive [hh:mm:ss]

Indication of the times for impulse and pause for intermittent actuation.

(8) Position

Unique reference to the hardware topology.

(5) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(6) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(7) Language on display

Specifies the language for the system texts.

(8) Local alarm counter

Counts the alarms of the current control panel exclusively.

(9) Siren reset (when button BUZZER RESET is pressed)

If this option is set, pressing the "BUZZER RESET" button will also reset the sirens.

(10) Buzzer reset of ALL operating panels (when button BUZZER RESET is pressed)

If this option is set, pressing the "BUZZER RESET" button will reset the acoustic on all the control panels.

(11) Display of lists according to VdS (DIN texts is not correct)

If the option is not set (default), the event lists are represented on the display in this format:

Element type – Element number – List number

If the option is set, the event lists are represented on the display in this format:

List number – Element status – Element type – Element number

(12) Display backlight on event

Automatically lights up the display when a message is received.

(13) Fire alarm LED on maintenance alarm

If this option is set, the fire alarm LED is activated in the event of a maintenance alarm. However the maintenance has to be started using this control panel. If the maintenance is started via the ServiceCenter, the fire alarm LED on maintenance alarm has no function.

(14) Show pre-signals

Pre-signal messages can be shown or suppressed on this device.

(15) Boolean function alarm acoustic

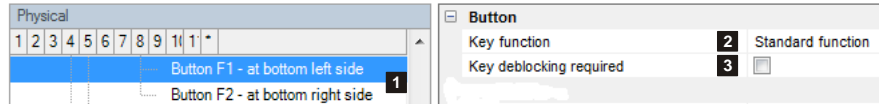
If the Boolean function is true, the alarm tone will sound on this device.

(16) Boolean function fault acoustic

If the Boolean function is true, the fault tone will sound on this device.

(1) Button F1 / Button F2

The lowest keys and LEDs left and right are freely programmable. Keys can be optionally locked.



(2) Key function

Selection:

- Inactive No function
- Command Defines any command for element operation.
-> see description a) below
- Menu Command "Display version number" or "Display alarm counter"
-> see description b) below
- Standard function Command "Delay2, "Inspect" or "Activation"
-> see description c) below

(3) Key deblocking required

Local deblocking is required by pressing the ScrollUp and ScrollDown keys.

(4) LED definition x

For the description see further below in the document

a) Parameter for the "Key command" category when selecting key function = "Command"

(1) Operating level

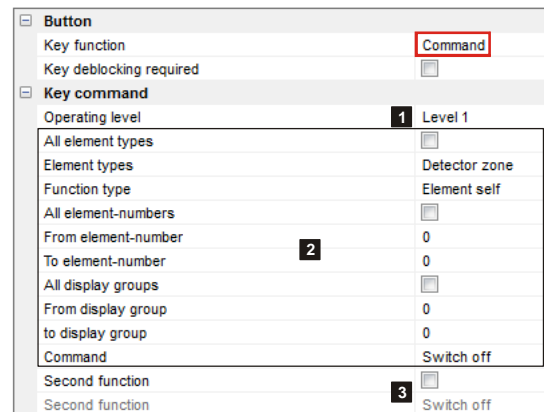
Defines the operating level with which the command is sent. This is crucial if operation macros are stored under elements. Depending on the operating level the command is then applied to the corresponding element or not.

(2) Command definition

Specifies the command.

(3) Second function

If the option is set, this command is executed with every second key-stroke instead of the command under (2).



b) Parameter for the "Key menu" category when selecting key function = "Menu"

(1) Menu item

Selection:

- Displays the version number
- Displays the alarm counter



c) Parameter for the "Key function" category when selecting key function = "Standard function"

(1) Standard function

Selection:

- "Delay" command
- "Inspect" command
- "Activation" command
- "Reset system (Sweden)" command: System reset possible only while an intervention is running.



LED definitions 1 to 3

The LEDs on keys F1 and F2 are freely programmable. They can be activated in three different colours, both steady and flashing. 3 definitions can be made for each LED. Definition 1 takes priority over LED definition 2 and definition 2 takes priority over LED definition 3.

If the "Standard function" key function is selected for the key, the LED definition is not available. In this case the LED definition is preset.

(1) Activation criterion

Selection for activating the LED:

- Inactive
- Boolean function
Assigns an existing or a new Boolean function.
- Status
Status active = key is in "Second function" mode
- Collective criterion internal
Selection from a predefined list

(2) Colour

Selection between red, yellow and green.

(3) Blinking

If the option is not set, the activation is steady.

LED definition 1	
Activation criterion	Boolean function
Boolean function	Alarm general
Collective criterion	none
Colour	Red
Blinking	<input checked="" type="checkbox"/>
LED definition 2	
Activation criterion	Collective criterion internal
Boolean function	
Collective criterion	Fault general
Colour	Yellow
Blinking	<input checked="" type="checkbox"/>
LED definition 3	
Activation criterion	Status
Boolean function	
Collective criterion	none
Colour	Green
Blinking	<input type="checkbox"/>

2.5.5 B5-MMI-IPS

Intervention panel, Sweden.

The valid project planning parameters are the same as those for the B5-MMI-FIP. See Section 2.5.4 B5-MMI-FIP

2.5.6 B5-MMI-FPS, B5-MMI-IPS

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(5) Transmission unit

Assigns the output (log. number) of the transmission unit for the display and operation on this indication and control map.

(6) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(7) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(8) Fallback to root display

Time for the automatic switch to the basic display after the last key is pressed.

(9) Hold display backlight

Time for the display backlight to switch off after the last keystroke.

(10) Scroll speed

Time for displaying an event before the next one is displayed.

[Physical view, logical view]

Logical		
Number	1	1
Designation		
Object text	2	
Position	3	SCP 2000 (1)
Fire brigade panel		
Authorisation level	4	Level 1
Transmission unit	5	<none>
Range filters	6	
Message filters	7	
Display Timing		
Fallback to root display	8	00:00:15
Hold display backlight	9	00:00:15
Scroll speed	10	00:00:01

2.5.7 B3-MMI-FAT

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(5) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(6) Parallel FBM

If a parallel fire brigade map is connected, the device type must be selected here.

(7) Fallback to root display

Time for the automatic switch to the basic display after the last key is pressed.

(8) Hold display backlight

Time for the display backlight to switch off after the last keystroke.

(9) Scroll speed

Time for displaying an event before the next one is displayed.

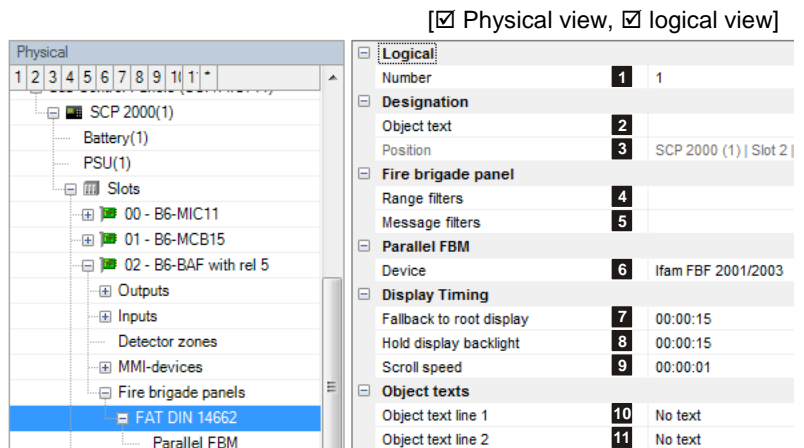
(10) Object text line 1, (11) Object text line 2

Selection options:

- No text
- Object text line 1
- Object text line 2

This device has only 2 lines for displaying object texts. The planned object text (2) for display lines 1 (10) and 2 (11) are assigned here.

[Physical view, logical view]



Property	Value
Number	1
Designation	2
Position	3 SCP 2000 (1) Slot 2
Fire brigade panel	4
Message filters	5
Parallel FBM	6 Ifam FBF 2001/2003
Display Timing	7 00:00:15
Fallback to root display	8 00:00:15
Hold display backlight	9 00:00:01
Scroll speed	
Object texts	
Object text line 1	10 No text
Object text line 2	11 No text

2.5.8 FAT parallel

(1) Number

Unique number of the logical system object.
Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) FBM parallel type

The selected device type is displayed here.

(5) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(6) Transmission unit

Assigns the output (log. number) of the transmission unit for the display and operation on this indication and control map.

(7) FBM includes the element External

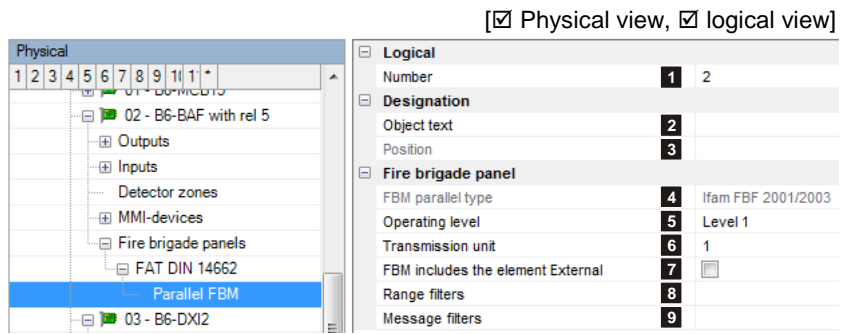
The External element type can be displayed on this device and switched to be operable.

(8) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(9) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..



2.6 EPI devices

The devices MIC11/ MIC711 as well as MMI-FIP and B5-MMI-IPS have an EPI bus base interface. Up to 3 additional, non-redundant indication and control maps can be connected to the bus; they must be fitted in the immediate vicinity (max. line length 1m). EPI devices available: B5-EPI-ASP, B5-EPI-FPC, B5-EPI-PCM, B5-EPI-PIM, B5-EPI-FPD, B5-EPI-FAT, B5-EPI-FPS, B5-EPI-FPCZ.

Notice: Each EPI device occupies 1 address on the MMI bus. One of three possible EPI-BUS addresses is set using the hex coding switch on the device.

2.6.1 B5-EPI-FPC, B5-EPI-FPD, B5-EPI-FPCZ

(1) Number

Unique number of the logical system object.
Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(5) Transmission unit

Assigns the output (log. number) of the transmission unit for the display and operation on this indication and control map.

(6) Element "External" visible and operable

The External element type can be displayed on this device and switched to be operable.

(7) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(8) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

[Physical view, logical view]

Property	Value	Value
Logical		
Number	1	1
Designation		
Object text	2	
Position	3	SCP 2000 (1)
Fire brigade panel		
Operating level	4	Level 8
Transmission unit	5	<none>
Element "external" visible and operable	6	<input checked="" type="checkbox"/>
Range filters	7	
Message filters	8	

2.6.2 B5-EPI-FPS

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(3) Position

Unique reference to the hardware topology.

(4) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(5) Transmission unit

Assigns the output (log. number) of the transmission unit for the display and operation on this indication and control map.

(6) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(7) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(8) Fallback to root display

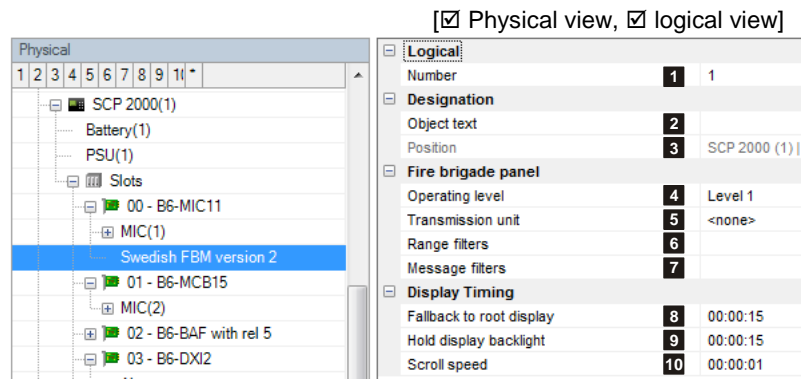
Time for the automatic switch to the basic display after the last key is pressed.

(9) Hold display backlight

Time for the display backlight to switch off after the last keystroke.

(10) Scroll speed

Time for displaying an event before the next one is displayed.



2.6.3 B5-EPI-FAT

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

[Physical view, logical view]

Logical		
Number	1	1
Designation		
Object text	2	
Position	3	SCP 2000 (1)
Fire brigade panel		
Range filters	4	
Message filters	5	
Display Timing		
Fallback to root display	6	00:00:15
Hold display backlight	7	00:00:15
Scroll speed	8	00:00:01
Object texts		
Object text line 1	9	No text
Object text line 2	10	No text

(3) Position

Unique reference to the hardware topology.

(4) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(5) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(6) Fallback to root display

Time for the automatic switch to the basic display after the last key is pressed.

(7) Hold display backlight

Time for the display backlight to switch off after the last keystroke.

(8) Scroll speed

Time for displaying an event before the next one is displayed.

(09) Object text line 1, (10) Object text line 2

Selection options:

- No text
- Object text line 1
- Object text line 2

This device has only 2 lines for displaying object texts. The planned object text (2) for display lines 1 (9) and 2 (10) are assigned here.

2.6.4 B5-EPI-ASP

No settings can be made.

2.6.5 B5-EPI-PIM

(1) EPI master

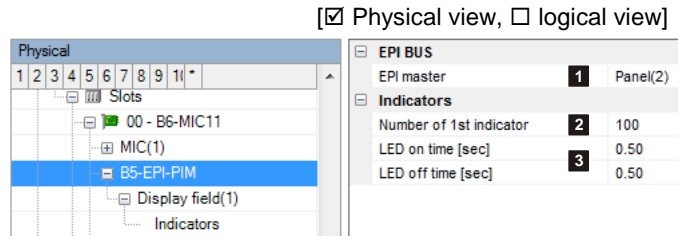
This parameter ensures the blink synchronisation between the EPI devices. The device selected here acts as the master.

(2) Number of 1st indicator

Indication of the logical number of the 1st indicator on this device

(3) LED on time / LED off time [s]

Indication of the times for LED flashing, from 0.02 s to 5.00 s



(1) Number

Unique number of the logical system object.
Permissible value range 1 ... 65535

(2) Position

Unique reference to the hardware topology.

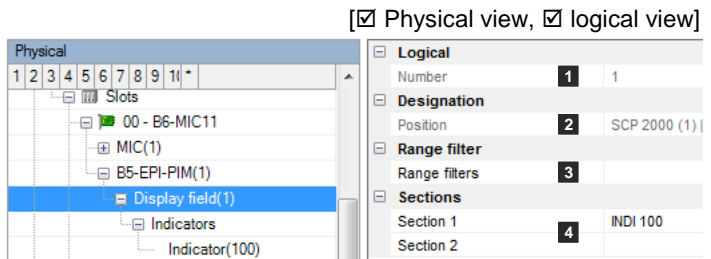
(3) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(4) Sections 1 and 2

Section 1 = left LED row, LED 1-16, yellow/red
Section 2 = right LED row, LED 16-32, yellow/red

Assistant for the automatic assignment of the logical numbers to indicators. The texts for the device labelling strips are also specified here.



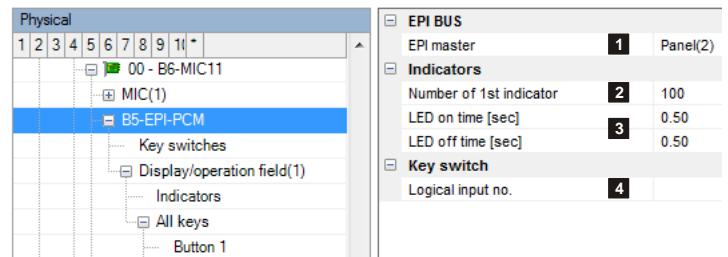
2.6.6 B5-EPI-PCM

[Physical view, logical view]

EPI device with user-programmable 16 LEDs and 8 keys. 1 input for key switch.

(1) EPI master

This parameter ensures the blink synchronisation between the EPI devices. The device selected here acts as the master.



(2) Number of 1st indicator

Indication of the logical number of the 1st indicator on this device

(3) LED on time / LED off time [s]

Indication of the times for LED flashing, from 0.02 s to 5.00 s

(4) Logical input No.

An input can be created here to represent the state of the key switch hardware input.

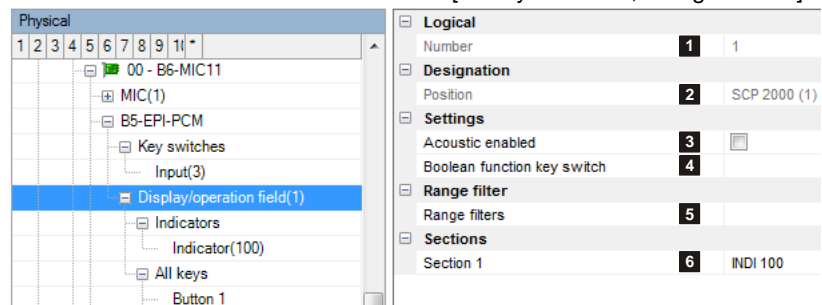
This input can be used for example as input condition for a Boolean function which in turn can be used to activate the key switch of other devices (PCM). A single key switch can therefore act on several devices.

If the key switch is to act only on this device, no input needs to be planned here. See also the explanations under "(3) Executable in operating level" later on in the document.

(1) Number

Unique number of the logical system object.
Permissible value range 1 ... 65535

[Physical view, logical view]



(2) Position

Unique reference to the hardware topology.

(3) Acoustic enabled

The buzzer of the PCM is activated if the option "Buzzer alarm" or "Buzzer fault" is activated on a PCM indicator for the activation criterion. The corresponding sound is generated as long as the indicator is active. The condition is that the option "Acoustic enabled" is activated.

(4) Boolean function key switch

When the Boolean function changes state from 0 to 1, a switch is made to authorisation level 2.

When the Boolean function changes state from 1 to 0, a switch is made to authorisation level 1.

Please note: this function has only one effect if the superordinate MIC is at operating level 1. If not, the operating level of the MIC is inherited.

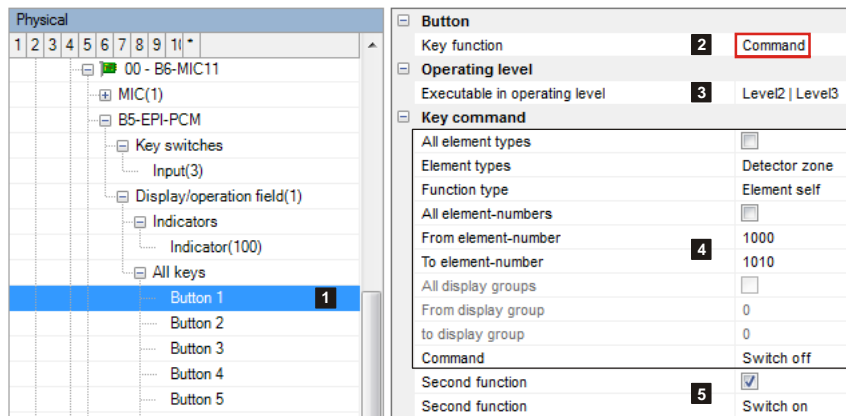
(5) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(6) Section 1

Left LED row, LED 1-16, yellow/red

Assistant for the automatic assignment of the logical numbers to indicators. The texts for the device labelling strips are also specified here.



(1) Buttons F 1 to 8

Each of the 8 keys is freely programmable.

(2) Key function

Selection:

- Inactive No function
- Command Defines any command for element operation.
-> see description below
- Standard function Command "Switch device to operating level 2" or "Reset buzzer"

(3) Executable in operating level

The key command is executed only if the PCM is in one of the selected operating levels.

Explanation of the PCM operating level:

- The PCM inherits the operating level of the superordinate MIC.
- The PCM can be switched to operating level 2 as follows:
"Key switch" hardware input OR "Key switch Boolean function" OR key function "Switch device to operating level 2".

(4) Command definition

Specifies the command.

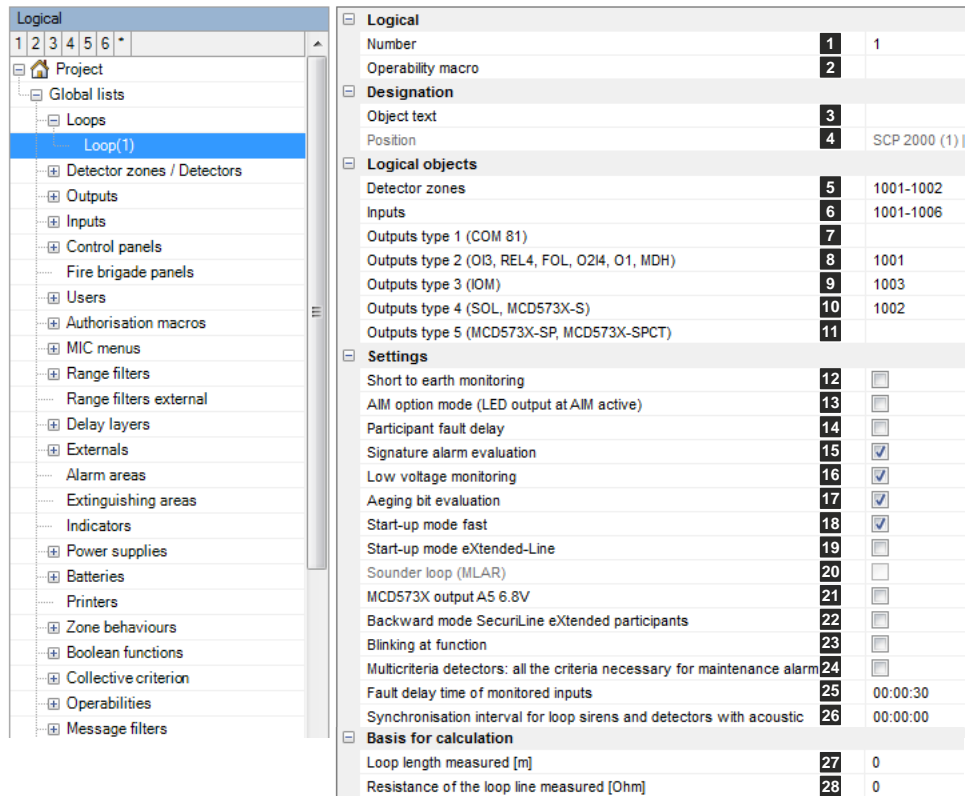
(5) Second function

If the option is set, this command is executed with every second keystroke instead of the command under (4)

2.7 Properties of logical elements

2.7.1 Loop / line

[Physical view, logical view]



Logical		
Number	1	1
Operability macro	2	
Designation		
Object text	3	
Position	4	SCP 2000 (1)
Logical objects		
Detector zones	5	1001-1002
Inputs	6	1001-1006
Outputs type 1 (COM 81)	7	
Outputs type 2 (OIB, REL4, FOL, O2I4, O1, MDH)	8	1001
Outputs type 3 (IOM)	9	1003
Outputs type 4 (SOL, MCD573X-S)	10	1002
Outputs type 5 (MCD573X-SP, MCD573X-SPCT)	11	
Settings		
Short to earth monitoring	12	<input type="checkbox"/>
AIM option mode (LED output at AIM active)	13	<input type="checkbox"/>
Participant fault delay	14	<input type="checkbox"/>
Signature alarm evaluation	15	<input checked="" type="checkbox"/>
Low voltage monitoring	16	<input checked="" type="checkbox"/>
Aeging bit evaluation	17	<input checked="" type="checkbox"/>
Start-up mode fast	18	<input checked="" type="checkbox"/>
Start-up mode eXtended-Line	19	<input type="checkbox"/>
Sounder loop (MLAR)	20	<input type="checkbox"/>
MCD573X output A5 6.8V	21	<input type="checkbox"/>
Backward mode SecuriLine eXtended participants	22	<input type="checkbox"/>
Blinking at function	23	<input type="checkbox"/>
Multicriteria detectors: all the criteria necessary for maintenance alarm	24	<input type="checkbox"/>
Fault delay time of monitored inputs	25	00:00:30
Synchronisation interval for loop sirens and detectors with acoustic	26	00:00:00
Basis for calculation		
Loop length measured [m]	27	0
Resistance of the loop line measured [Ohm]	28	0

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Detection zones

A number range for elements of the "Detection zone" type is specified for each loop (e.g. 101-120, 123).

The addresses are allocated to the detectors later on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection.

B5-DAI2, B5-DXI2, B4-DAI2, B6-DXI2:

It is permissible to create detection zones across several loops and SCPs, i.e. the detectors of a detection zone can be located both on several loops and even on different SCPs. However, this should only be used in special cases as multiple loop management can impact negatively on the system's performance.

When using modules (BX-AIM, BX-OI3) take note of whether they are later to respond as a detector or as a detection zone (defined in the "Loop configuration" step). This needs to be taken into account when specifying the number range. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

B3-DTI2

It is NOT permissible to create detection zones across several loop and SCPs.

It is possible to split the detection zones over two stub lines of the same loop connection.

(6) Inputs

A number range for elements of the "Input" type is specified for each loop (e.g. 151-160). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(7) Outputs, type 1 (COM81)

A number range for elements of the "Output type 1" type is specified for each loop (e.g. 151-155). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(8) Outputs, type 2 (OI3, REL4, FOL, O2I4, O1)

A number range for elements of the "Output type 2" type is specified for each loop (e.g. 161-165). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(9) Outputs, type 3 (IOM)

A number range for elements of the "Output type 3" type is specified for each loop (e.g. 171-175). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(10) Outputs, type 4 (SOL, MCD573X-S)

A number range for elements of the "Output type 4" type is specified for each loop (e.g. 181-185). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(11) Outputs type 5 (MCD573X-SP, MCD573X-SPCT)

A number range for elements of the "Output type 5" type is specified for each loop (e.g. 191-195). The addresses are allocated to the modules on, in the "Loop configuration" step. Only the number ranges specified here can be used for selection. It is advisable to select the number ranges in such a way that enough free numbers remain available for any subsequent expansions to the loop in question.

(12) Short to earth monitoring

It is possible to activate/deactivate the short-to-earth monitoring for the loop.

(13) AIM option mode

Default mode (option not set): An alarm is NOT displayed by the alarm LED integrated in the detector base or detector, but exclusively by the parallel indicator connected to the BX-AIM.

Option mode (option set): In the event of an alarm the alarm LED integrated in the detector base or detector is actuated; the parallel indicator output of the BX-AIM is also activated. In this case several detectors can be connected for each BX-AIM.

(14) Participant fault delay

An error message is displayed only after 10 unsuccessful polls of the participant concerned (default poll =3).

(15) Signature alarm evaluation

Signature alarm is a special method for quickly testing an automatic detector. This function is available only for addressable detectors of the SecuriStar series.

(16) Low voltage monitoring

Evaluation of the undervoltage bit on the SecuriStar detector series 573. It becomes active if the loop voltage is below a defined value.

(17) Ageing bit evaluation

Evaluation of the ageing bit on the SecuriStar detector series 573.

(18) Start-up mode fast

Option not set: The time delay for the first poll of a participant is 500ms. For compatibility with "old" participants.
Option set: The time delay for the first poll of a participant is 250ms.

(19) Start-up mode eXtended line

To be used only if all the participants comply with the SecuriLine eXtended specification.

(20) Sounder loop (MLAR)

Siren loop conforming to MLAR.

To be used only if all the participants are of the type BX-SOL.

For up to 20 BX-SOL the max. start-up time is 5 s.

Affects the following 3 parameters:

- Reset time 400ms (instead of 10 s)
- Short-circuit test after 350ms (instead of 8 s)
- 3 retries during power-up (instead of 25 retries)

(21) MCD573X output A5 6.8V

Option not set (default): The voltage at active output A5 of MCD573X (all on this loop) is 5V.

Option set:

- The voltage at active output A5 of MCD573X (all on this loop) is 6.8V.
- The loop allows for a maximum of 128 participants.

(22) Backward mode SecuriLine eXtended participants

Option set:

Max. number of participants on the loop 128. All the SecuriLine eXtended participants on this loop are operated in backward compatible mode. This means that during operation SecuriLine participants are directly exchangeable with SecuriLine eXtended participants without adapting the loop configuration accordingly.

Example: MCD573 replacement with MCD573X.

Option not set:

Example: For the control panel the MCD573X is another detector type and can only replace the MCD573 if the appropriate adjustment is made in the loop configuration.

Recommendation: Always set the option except for SecuriLine eXtended mode.

(23) Blinking at function

Applies only to detector types MCD 573X-S and CCD573X. During operation the LED is briefly activated periodically.

(24) Multiple sensor detectors: all the criteria necessary for maintenance alarm

With multiple sensor detectors, a sequential or parallel check of the individual sensors can be made in maintenance mode.

Option set:

A maintenance alarm is only signalled when all sensors have been activated.

Option not set:

The corresponding maintenance alarm is signalled as soon as a sensor has been activated.

(25) Fault delay time of monitored inputs

An event delay time for fault messages can be programmed on monitored inputs located on a loop module: A delay time needs to be programmed if an input on the BX-IM4 module is programmed as monitored and the monitoring is intentionally interrupted for a set amount time, but the interruption should not immediately trigger a fault.

(26) Synchronisation interval for loop sirens and detectors with acoustic

Sets the synchronisation interval for the BX-SOL, BX-SBL, MCD573X-S, MCD573X-SP and MCD573X-SPCT (BA-SOL cannot be synchronised). For detectors with voice output MCD573X-SP and MCD573X-SPCT an interval of maximum 10 sec applies. Setting 00:00:00 = no synchronization.

(27) Loop length measured

The loop length measured can be entered here in metres. It can then be used as the calculation basis for checking the length of the loop configuration.

(28) Resistance of the loop line measured

The loop line resistance measured can be entered here in Ohm. It can then be used as the calculation basis for checking the length of the loop configuration.

2.7.2 Detection zone

Physical view, logical view

Alarm response explanations:

Chain of actions:

Detector alarm → Detection zone alarm → Detection zone macro active → Hard alarm (directly or on expiry of a programmed DT/IT)

The response when planning a 2–detector dependency is explained at the end of this section

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

Property	Value	Unit/Description
Number	1	1
Operability macro	2	Detector Zone
Object text	3	
Position	4	
Detector zone behaviour	5	03_Fire Detector with Delay
Delay layer	6	2
Quantity of detectors automatic	7	<input checked="" type="checkbox"/>
Quantity of detectors	8	0
Two detector dependency (Day)	9	<input type="checkbox"/>
Dependency result of assignment (Day)	10	
All levels (Day)	11	<input checked="" type="checkbox"/>
up to level (Day)	12	None
Display „Alarm unconfirmed“ (Day)	13	<input type="checkbox"/>
Two detector dependency (Night)	14	<input type="checkbox"/>
Dependency result of assignment (Night)	15	
All levels (Night)	16	<input checked="" type="checkbox"/>
up to level (Night)	17	None
Display „Alarm unconfirmed“ (Night)	18	<input type="checkbox"/>

(4) Position

Unique reference to the hardware topology.

(5) Detection zone macro

It is imperative to select a detection zone macro in order to specify the mode of operation of the detection zone concerned.

(6) Delay layer

The way in which detection zones operate can differ depending on day or night operation. (e.g. Day => delayed alarms / Night => undelayed alarms).

If no delay layer is selected, the detection zone in question is always in night operation.

(7) Quantity of detectors automatic / (8) Quantity of detectors

Only for detector zones on B3-MTI8: it can be specified how many detectors are on the line.

(9) Two-detector dependency

At least two detectors of each detection zone must switch to alarm for the detection zone macro to be activated.

(10) Dependency result of assignment

If a Boolean function is entered here, it must be active for the detection zone macro to be activated.

(11) All levels

The dependencies apply to all the levels.

(12) Up to level

Alarm with a higher level directly activate the detection zone macro.

(13) Display "Alarm unconfirmed"

If a 2-detection dependency or a "Dependency result of assignment" is planned, the alarm of the first detection is signalled as "ALARM UNCONFIRMED". Condition: The option "Status pre-alarm enabled" under "General settings" is not set.

The detection zone takes on the "Alarm" state with the alarm of the first detector. The "Alarm unconfirmed" sub-state, which is also used in a Boolean function, collective criterion, etc., also becomes active.

2.7.2.1 Responses when planning a 2–detector dependency

Planning		System behaviour	
Display "Alarm unconfirmed"	Status pre-alarm enabled	1st alarm response	2nd alarm response
Inactive	Inactive	MIC text: ALARM DZ state: Alarm	1. MIC text: ALARM 2. The detection zone macro is activated. Triggers the hard alarm once the planned Day/Night conditions are met 3. DZ state: Hard alarm
Inactive	Active	MIC text: ALARM DZ state: Alarm	
Active	Inactive	MIC text: ALARM UNCONFIRMED DZ state: Alarm Detection zone sub-state: alarm unconfirmed	
Active	Active	MIC text: PRE-ALARM DZ state: Pre-alarm	

2.7.3 Detection zone macro

[Physical view, logical view]

Logical		
Name	1	03_Fire Detector with Delay
Settings		
Subtype	2	automatic detector
Hold time maintenance alarm	3	00:00:10
Delay daytime		
Hard alarm	4	<input type="radio"/> not delayed
	5	<input type="radio"/> Always blocked
	6	<input checked="" type="radio"/> Intervention
	7	<input type="radio"/> Delay
Delay time	8	00:00:01
Level	9	all
up to level	10	Level 1
Delay nighttime		
Hard alarm	11	<input checked="" type="radio"/> not delayed
	12	<input type="radio"/> Always blocked
	13	<input type="radio"/> Intervention
	14	<input type="radio"/> Delay
Delay time	15	00:00:01
Level	16	all
up to level	17	Level 1
Silent alarm		
Silent alarm	18	<input type="checkbox"/>
Behaviour	19	Always silent alarm
Silent alarm quantity	20	0
Silent alarm time slot	21	00:05:00
Alarm reset time	22	00:00:01
Module specific settings		
Alarm buffer	23	<input type="checkbox"/>
Prewait time	24	00:00:00
Wait time	25	00:00:00
Detection of deception alarm (only MIT, DCI, DTI)	26	<input type="checkbox"/>
Deception time	27	00:10:00
Threshold value	28	1
Allow all commands (DA/VDX/LXI,LEE23/24,DTI)	29	<input checked="" type="checkbox"/>
Commands allowed	30	
Alarm suspend time (DA/VDX/LXI)	31	00:00:30
Contamination	32	<input checked="" type="radio"/> always visible
	33	<input type="radio"/> not visible
	34	<input type="radio"/> visible from level
Contamination level	35	Level 2

(1) Name

User-definable text used for identifying the element.

(2) Subtype

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(3) Hold time maintenance alarm

Time until a maintenance alarm is automatically reset (default = 10 s).

(4) Hard alarm

The forwarding of this detection zone's "hard alarm" is organised subject to the Day/Night state. The delay layer is active by day and passive by night as standard. The response of the hard alarm can be planned.

(4) (11) Not delayed

The "hard alarm" occurs at the same time as the "normal" alarm signal.

(5) (12) Always blocked

The "hard alarm" is blocked; only a normal alarm signal occurs. The "hard alarm" is always blocked when "silent alarm" is planned.

(6) (13) Intervention

The "hard alarm" occurs in accordance with the settings of the intervention circuit.

(7) (14) Delay

The "hard alarm" occurs after an adjustable delay time.

(8) (15) Delay time

This time is valid for the "Delay" response (0.10 s to 31.00 h).

On VdS/EN54 compliant systems, the sum of the acknowledgement time and inspect time must not exceed 10 minutes.

(9) (16) Level

All: The response set under "hard alarm" applies to all alarms, regardless of their level

(10) (17) Up to level

The response set under "hard alarm" applies to all alarms up to and including the selected level. If an alarm with a higher level occurs, the hard alarm is triggered directly, even if **Always blocked**, **Intervention** or **Delay** was set.

(18) – (22) Silent alarm

A "silent alarm" is not indicated on the control panel of the fire alarm control panel (neither visually nor audibly) and is provided for special applications. A "silent alarm" is automatically reset after an adjustable reset time (default = 10s). If a planable threshold is exceeded (e.g. max. 3 alarms in 10 mins) the next alarm on the detection zone is displayed and treated like a "normal" alarm.

(23) – (25) Alarm buffer

If an alarm occurs, it is buffered in the intermediate alarm storage. Once the **pre-waiting time** has expired, the alarm is automatically reset and the **waiting time** begins. If a new alarm occurs during that time, it is forwarded; if not, the intermediate alarm storage is cleared.

(26) - (28) Detection of deception alarm (MTI, DCI, DTI only)

A contaminated detector is generated only if the **threshold value** is exceeded within the **evaluation time**.

(29) Allow all commands (DAI/DXI/LXI, LEE23/24, DTI) / (30) Commands allowed

Permissible commands for operating a single detector within a detection zone.

(31) Alarm suspend time (DAI/DXI/LXI)

This is the amount of time after an alarm reset during which another alarm criterion is not evaluated.

(32) - (35) Contamination

always visible:	The message is always sent with level 4.
never visible:	The contamination is never signalled.
visible from level:	Message in accordance with the set soiling level

2.7.4 Output

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Subtype The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

[Physical view, logical view]

Logical	
Number	1 3
Operability macro	2
Designation	
Object text	3
Position	4 SCP 3000 (2)
Output	
Subtype	5 general
Output for main siren	6 <none>
Activation criterion	
Activation criterion 1	
Activation criterion 2	
Activation criterion 3	7
Activation criterion 4	
Settings	
Critical	8 <input type="checkbox"/>
Reactivation possible	9 <input type="checkbox"/>
Access level depending (Activation criterion)	10 <input type="checkbox"/>
Access level depending (Alarm)	11 <input type="checkbox"/>
Active when disabled	12 <input type="checkbox"/>
Normally closed contact	13 <input type="checkbox"/>
Active in Fail-Safe-Position	14 <input type="checkbox"/>
Activate at emergency mode	15 <input type="checkbox"/>
Ignore fault when activated	16 <input type="checkbox"/>
TUS	17 <input type="checkbox"/>
Acknowledging feedback	18 <input type="checkbox"/>
Acknowledgement timeout	19 00:00:10
Suspend adjustment after activation	20 <input type="checkbox"/>
Limitation of the activation time	
Max. activation time	21 00:00:00
Mode	22 Logical
Output behaviour	
Activation mode	23 Static
Tone type	DIN tone

(6) Output for main siren

The main siren subtype is normally assigned to at least one output. If the "ancillary siren" is assigned to other outputs, the ancillary sirens can be assigned to a main siren. The ancillary sirens then respond in the same way as the main siren, i.e. if the main siren is reset, the ancillary sirens are reset too. The same applies to reactivations.

(7) Activation criterion

Selects a Boolean function to activate this output. As long as the Boolean function is active, the output is activated. The following applies: Activation criterion 1 has the highest priority; activation criterion 4 has the lowest priority.

(8) Critical

Outputs with the "Critical" option have a special response:

- MIC: trigger only after confirmation prompt
- ServiceCenter: trigger only via the command "Trigger (critical elements)"

(9) Reactivation possible

Allows the relevant output to be reactivated automatically if the output was already reset from the control panel or the fire brigade map. For example in the event of an alarm being received once again.

(10) Access level depending (alarm)

Outputs to which this function is assigned are automatically deactivated if the user switches to an operating level greater than 1 on the control panel. The relevant output can then neither be triggered nor operated by the user. The output is only automatically deactivated if there is no alarm in the system.

(11) Access level depending (activation criterion)

Outputs to which this function is assigned are automatically deactivated if the user switches to an operating level greater than 1 on the control panel. The relevant output can then neither be triggered nor operated by the user. The output is only automatically deactivated if the activation criterion for this output is not active.

(12) Active when disabled

This function causes the relevant output to be automatically triggered once it has been deactivated. This is used for example with retaining magnet control systems.

(13) Normally closed contact

If this option is set, the relevant output acts as a normally closed (NC) contact.

(14) Active in Fail-Safe-Position

If this function is activated, the relevant output is always actuated if:

- The control panel is cut off from the power supply (mains and battery power supply)
- A warm start is carried out (system reset)
- The control panel switches to the B-side due to a simple fault in the system
- If the relevant output is located on a loop module and the loop is cut off from the power supply.

(15) Activate at emergency mode

If the emergency mode is activated by the software redundancy, this output is activated.

(16) Ignore fault when activated

No output faults will be signalled for as long as the output is triggered.

(17) TUS

This option must be set if a TUS35 device is connected to the output.

(18) Acknowledgement feedback

Must be activated if the relevant output is used to actuate a transmission system optional feedback line and the feedback line is connected to the feedback input of the relevant output (e.g. MDL-F).

(19) Acknowledgement timeout

Time indication until the acknowledgement is received; a fault is generated if it is exceeded (max. 5 minutes).

(20) Suspend adjustment after activation

Option set: the output responds like a non-adjusted output for 20 minutes after the activation state has ended. Once the time period has elapsed, the original sensitivity of the fault detection is reactivated. This is needed for devices that heat up in the activation state and change their resistance as a result (e.g. relays, etc.).

(21) Max. activation time

00:00:00 : The output is activated for as long as the activation criterion is active.

00:02:10 : In this example the output becomes passive again after 2 min 10 s at the latest.

Value range for the limitation time: 00:00:01 ... 01:00:00

(22) Mode

Logical: Output is activated when the activation criterion for the set time (e.g. 2 min) is imposed. Thereafter it is automatically reset even if the activation criterion should still be present. After the automatic reset the relevant output disappears immediately from the control panel activation list.

Physical: Output is activated when the activation criterion for the set time (e.g. 2 min) is imposed. Thereafter it is automatically reset even if the activation criterion should still be present. After the automatic reset (physical) the relevant output remains in the control panel activation list until the activation criterion becomes passive (e.g. as a result of an alarm reset)

23) Output behaviour

Depending on the output type, the parameters shown below appear.

Activation mode

Static: The output is statically activated

Blink time 1 / 2: The output is activated intermittently using blink time 1 or blink time 2 previously set for the relevant hardware.

Tone type

This parameter is used by loop sirens (outputs type 4: BX-SOL, SBL, MCD573X-S and outputs type 5: MCD573X-SP, MCD573X-SPCT). Different tone variants are available: DIN tone, slow whoop, permanent 990Hz, Swedish tone.

Acoustic type

This parameter is used for the detector acoustic (type 5 outputs: MCD573X-SP, MCD573X-SPCT).

Selection: "Text" or "Siren".

Acoustic macro (only with "Text" acoustic type)

A previously defined acoustic macro can be selected.

Acoustic macro repetitions (only with "Text" acoustic type)

Selection: Endless, 1x, 2x or 3x.

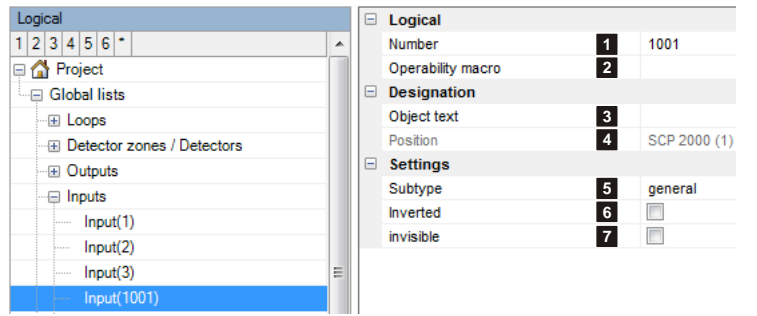
2.7.5 Input

(1) Number

User-definable text used for identifying the element.

(2) Operability macro

The operability of this element can be restricted using the operability macro.



(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Subtype

The following subtypes are available for inputs:

- general
- extinguishing system
- FIC/FPE fault (requirement set out in the standard)
- FIC/FPE trigger (requirement set out in the standard)

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(6) Inverted

Inputs are activated by normally open (NO) contacts. However, by inverting the relevant input, it is possible to activate the input using a normally closed (NC) contact.

This option is blocked on loop module inputs. Input inversion is carried out in the "Loop configuration" step.

(7) Invisible

If this function is activated, the active state of the input is output neither on the display nor on the printer. So to the outside the input is "invisible". This function is used mainly if the relevant input is linked with external alarms or external faults.

2.7.6 Indication and Control Map

The following device types are listed under this view:

- MIC (see section 2.4.8)
- B5-MMI-FIP (see section 2.5.4)
- B5-MMI-IPS (see section 2.5.5)

2.7.7 Fire brigade panel

The following device types are listed under this view:

- B5-EPI-FAT (see section 2.6.3)
- B5-EPI-FPCZ/B5-EPI-FPC/B5-EPI-FPD (see section 2.6.1)
- B3-MMI-FPS The settings of this device are identical to those of the MIC. However the MIC also has other settings (see section 2.5.6)
- B5-EPI-FPS (see section 2.6.2)
- B3-MMI-IPS (see section 2.5.6)

2.7.8 Users

(1) Name

User-definable text used for identifying the element.

(2) Access code

Password for operation via MIC. Value range 0...99999999.

(3) Operating level

Operating level enabled after user login

(4) Language

After user login the language selected here is displayed on the indication and control map. If the setting is "not selected", the display language selected for the indication and control map is used.

(5) Authorised for remote access

The operability of this element can be restricted using the operability macro.

(6) Remote access password

The password can be freely selected (1 to 17 characters) and is necessary for identification.

(7) Authorisations

Assignment of the user rights for operation, firmware download, configuration and service functions.

- never: No rights were granted.
- after enabling: Access is possible only once enabled locally.
- immediately: Immediate and unrestricted access possible after dial-in.

(8) Master system user

If this option is activated, the user is also authorised for access via the master system.

(9) Master system password

Password for access via the master system (1 to 17 characters).

[Physical view, logical view]

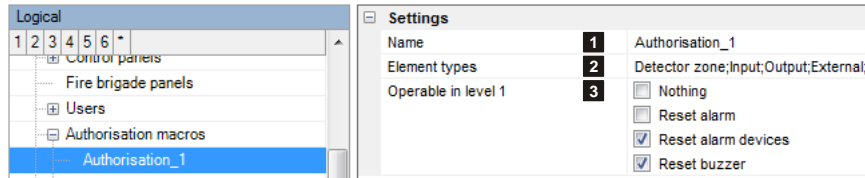
2.7.9 Authorisation macro

Physical view, logical view

An authorisation macro indicates which logical elements (e.g. detection zones, outputs, etc.) and which logical commands (e.g. switch on, switch off, reset, etc.) are visible and can be operated at the various authorisation levels.. Authorisation macros are used to define the authorisation structure and assign it to the element types "MIC", "Master system" and "External system".

(1) Name

User-definable text used for identifying the element.



(2) Element types

The display and operability is specified here via matrix for each object type/function type/command.

For outputs for example, the command "deactivate" can be:

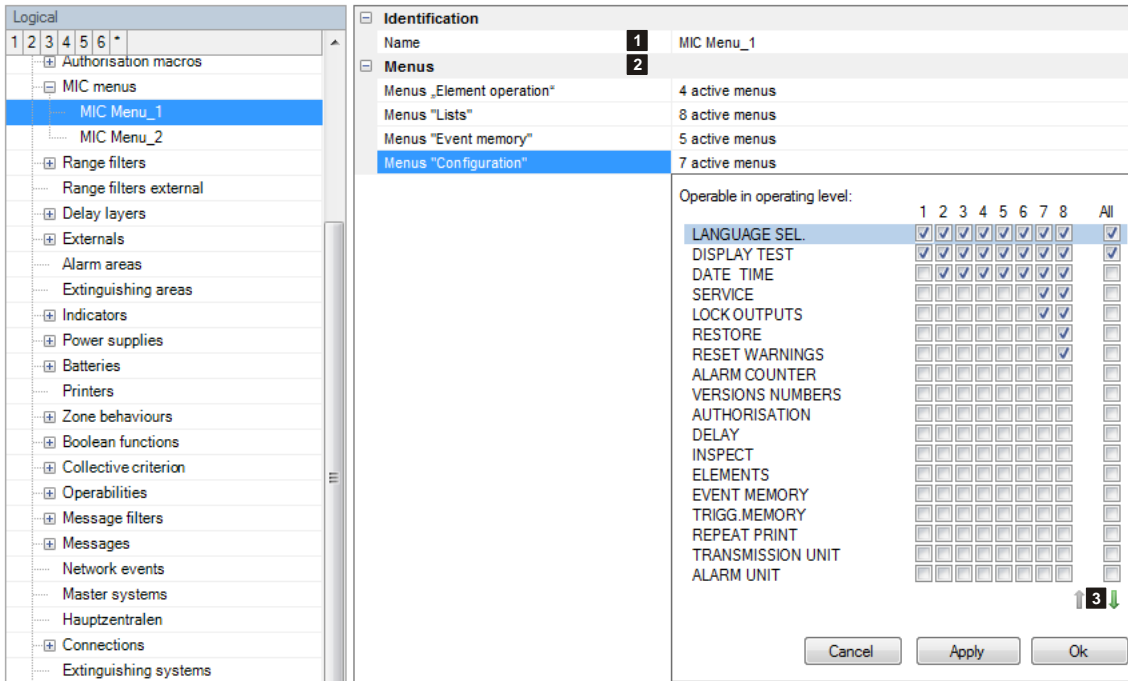
- Operating level 1: invisible
- Operating level 2: visible, but not operable
- Operating level 3: visible and operable

(3) Operable in level 1

The keys (commands) operable in level 1 are enabled.

2.7.10 MIC menu

Physical view, logical view



(1) Name

User-definable text used for identifying the element.

(2) Menus

The menu structure can be adapted for each MIC menu key "Element operation", "Lists", "Event memory" and "Configuration". The matrix used to specify which menu options are to be displayed in each operating level.

The texts of the menu options themselves cannot be edited.

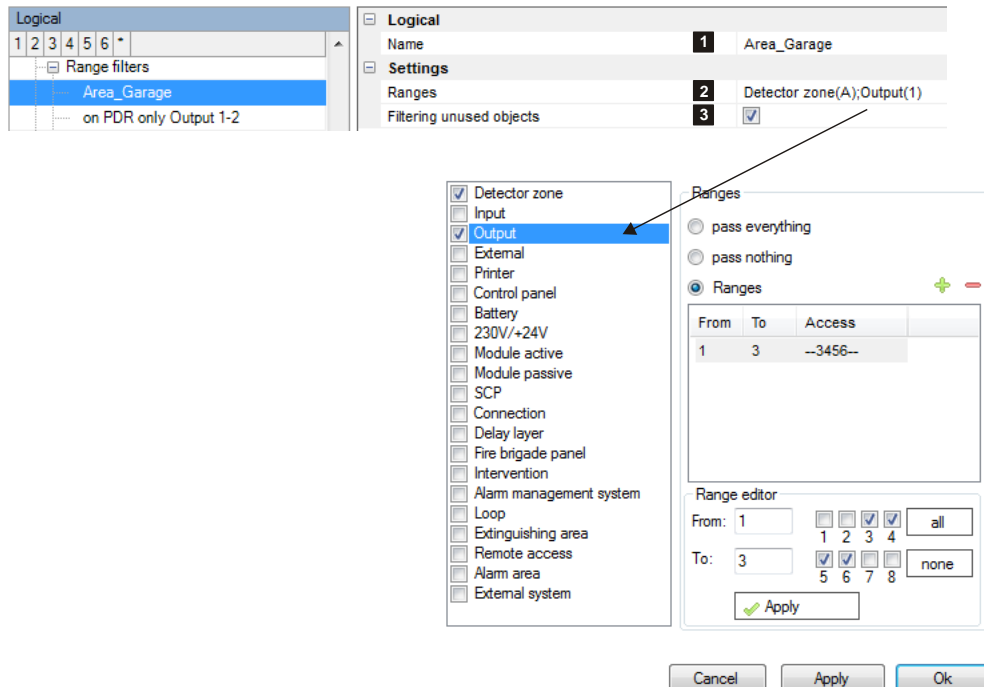
(3) Up / down keys

These keys are used to move a checked menu option up or down in its position.

2.7.11 Range filters

[Physical view, logical view]

Range filters are used to group a system's existing elements such as detection zones, outputs, etc. (control panel or Securi-Lan) into sub-ranges. A range filter can be used both to restrict the displays on control panels and printers and to define collective criteria, etc.



(1) Name

User-definable text used for identifying the element.

(2) Ranges

A range filter is defined by selecting the relevant element type. In the example this is the "output" element type. Various options can then be set:

- pass everything: All the elements of the checked element type can pass through the filter.
- pass nothing: No element of the checked element type can pass through the filter.
- Ranges: Only certain elements (e.g. output 3 – 10) can pass through the filter. All the other elements of the element type are rejected by the filter.

(3) Filtering unused objects

Any element types that are not checked cannot pass through the filter.

2.7.12 Delay layer

[Physical view, logical view]

Delay layers are used to switch automatically from Day (delay active) to Night (delay passive). The switchover time can be specified for each day of the week.

Automatic switchover from Night to Day is also supported. In this case the country-specific regulations must always be taken into account.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

Logical		
Number	1	1
Operability macro	2	Delay
Designation		
Object text	3	///23:00
Night -> Day		
<input type="checkbox"/> Monday morning		00:00
<input type="checkbox"/> Tuesday morning		00:00
<input type="checkbox"/> Wednesday morning		00:00
<input type="checkbox"/> Thursday morning	4	00:00
<input type="checkbox"/> Friday morning		00:00
<input type="checkbox"/> Saturday morning		00:00
<input type="checkbox"/> Sunday morning		00:00
Day -> Night		
<input checked="" type="checkbox"/> Monday evening		23:00
<input checked="" type="checkbox"/> Tuesday evening		23:00
<input checked="" type="checkbox"/> Wednesday evening		23:00
<input checked="" type="checkbox"/> Thursday evening	5	23:00
<input checked="" type="checkbox"/> Friday evening		23:00
<input checked="" type="checkbox"/> Saturday evening		23:00
<input checked="" type="checkbox"/> Sunday evening		23:00

(4) Night → Day

Switchover time for automatic switchover from Night → Day (delay active)

(5) Day → Night

Switchover time for automatic switchover from Day → Night (delay inactive)

2.7.13 External

(1) Number

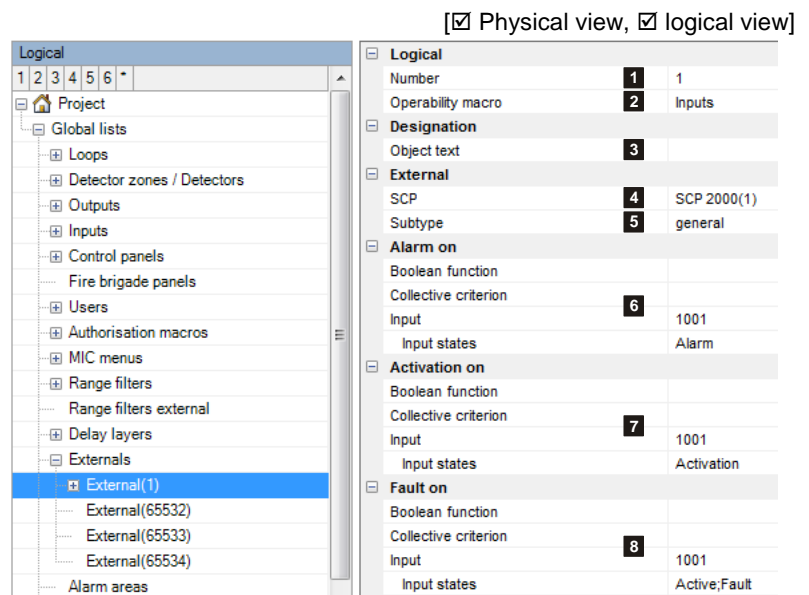
Unique number of the logical system object.
Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.



(4) SCP

Assignment to an SCP

(5) Subtype

Selects between the subtypes "general" and "extinguishing system".

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(6) Alarm on

Boolean function: Selects a previously defined Boolean function. If the Boolean function is true, the "External" element switches to the "Alarm" state.

Collective criterion: Selects a previously defined collective criterion. If the collective criterion is true, the "External" element switches to the "Alarm" state.

Input states: Selects an input and defines its state. If the input assumes the defined state, the "External" element switches to the "Alarm" state.

(7) Activation on

Boolean function: Selects a previously defined Boolean function. If the Boolean function is true, the "External" element switches to the "Automatic activation" state.

Collective criterion: Selects a previously defined collective criterion. If the collective criterion is true, the "External" element switches to the "Automatic activation" state.

Input states: Selects an input and defines its state. If the input assumes the defined state, the "External" element switches to the "Automatic activation" state.

(8) Fault on

Boolean function: Selects a previously defined Boolean function. If the Boolean function is true, the "External" element switches to the "Fault" state.

Collective criterion: Selects a previously defined collective criterion. If the collective criterion is true, the "External" element switches to the "Fault" state.

Input states: Selects an input and defines its state. If the input assumes the defined state, the "External" element switches to the "Fault" state.

2.7.14 Alarm area

[Physical view, logical view]

The alarm area is an element type designed for audible alarming. An alarm area is an area that is simultaneously alarmed with an audible signal, e.g. an entire floor.

The alarm area element can be used in different ways:

- in a Boolean link as input criterion
- Assignment to indicator outputs of loop elements (MCD573X(S), STD531, SDIxx)
If the alarm area is to be assigned to a loop element, it must be enabled for DAI/DXI/LXI.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) SCP

Assignment to an SCP

(6) Main alarm area

A main alarm area can be selected here for hierarchical operation. If for example the main alarm area is reset, the alarm areas concerned are also automatically reset. This setting does not affect the activation.

(7) Reactivation possible

Allows the alarm area to be reactivated automatically if the output was already reset from the control panel or the fire brigade map. For example in the event of an alarm being received once again.

(8) Invisible

If this function is activated, the active state of the alarm area is output neither on the display nor on the printer. So to the outside the alarm area is "invisible".

(9) Subtype

Selects between the subtypes "general" and "internal audible".

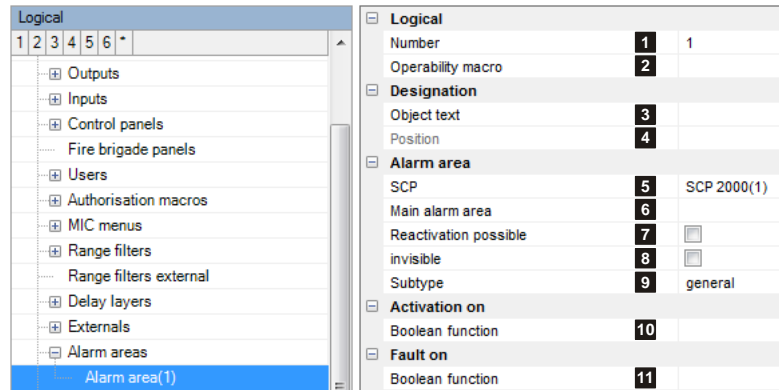
The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(10) Activation on

Boolean function: Selects a previously defined Boolean function. If the Boolean function is true, the "Alarm area" element switches to the "Activation automatic" state.

(11) Fault on

Boolean function: Selects a previously defined Boolean function. If the Boolean function is true, the "Alarm area" element switches to the "Fault" state.



2.7.14.1 Explaining the concept of "alarm area"

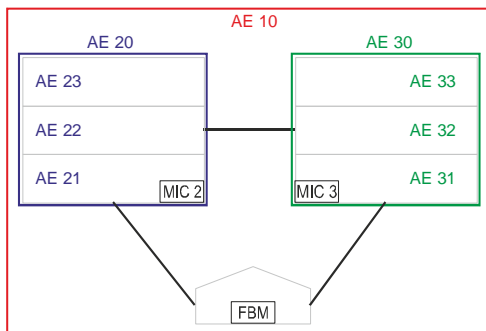
Alarm areas are used for acoustic alarming and can be hierarchically structured.

The following example shows two buildings, each with three floors and an entrance gate. In both buildings, each with a control unit incl. MIC and in the gate is a remote MIC711, connected via SecuriLan.

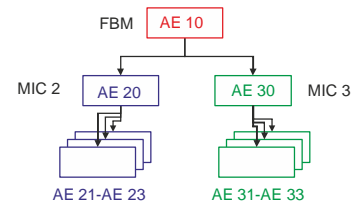
- In both buildings, the detector zones of each floor are assigned to an alarm area.
- The alarm areas of the three floors are subordinate to the alarm area in each building.
- The alarm areas of the two buildings are subordinated to the main alarm area AB 10.

If on fire brigade panel in the gate the button "Acoustic signals off" is pressed, all alarm areas are switched off, as the FBM acts on the main alarm area AB10.

If for example the alarm area 20 is switched off, the alarm areas 21 - 23 are switched off also, because alarm area 20 is the main alarm area of the alarm areas 21 – 23.



The effect of "Acoustic off" of the control devices to the alarm areas.

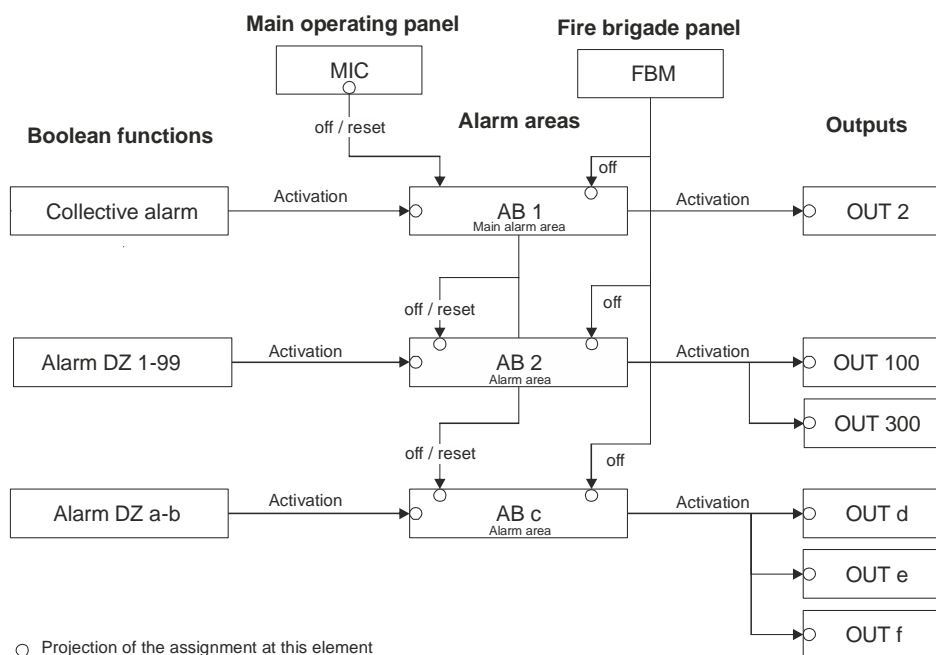


2.7.14.2 Explanation of the projection with "alarm areas"

In the horizontal, the action chain from the alarm to the activation of the the outputs is shown. In the vertical is shown the switch off and reset of the alarm areas

Notes on projecting:

- Before the projecting: preparation of the concept of the acoustic alarming acc. to the example in 2.7.14.1
- The activation via alarm area is only possible for outputs on the loop. For the other outputs, a Boolean function must be inserted between the alarm area and the output.
- The assignment to the fire brigade panel is made in the alarm areas by setting the "Subtype = Acoustic".



2.7.15 Extinguishing area

[Physical view, logical view]

The extinguishing area is a virtual element used to activate extinguishing systems. The extinguishing area comprises several logical states and their transitions.

A separate document is being planned on the subject of extinguishing systems; it will contain a detailed description of the extinguishing area element.

Logical	
Number	1
Operability macro	
Designation	
Object text	
Extinguishing area	
SCP	SCP 3000(2)
Reset time	00:00:05
key switch dependent	<input type="checkbox"/>
invisible	<input type="checkbox"/>
Element assignment	Input(1001);Output(1002);
Activation	
Pre activation criterion	
Activation criterion	
Release criterion	
Manual mode only	
Operability	
Manual mode only	<input checked="" type="radio"/> Never <input type="radio"/> Input <input type="radio"/> Boolean function
Input	<none>
Extinguishing agent flow	
Activation from	<input checked="" type="radio"/> Never <input type="radio"/> Input <input type="radio"/> Boolean function
Input	<none>
Maintenance mode	
Operability	
Activation from	<input checked="" type="radio"/> Never <input type="radio"/> Input

2.7.16 Indicator

[Physical view, logical view]

Indicators are a separate element type and are used to activate light-emitting diodes (LEDs).

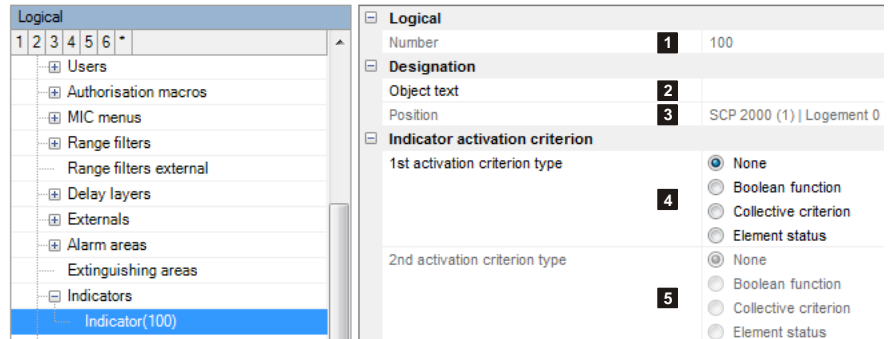
The LEDs are integrated in indication and control maps (e.g. B5-EIP-PIM, B3-MMI-EAT32) or are external and activated by an UIO board.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.



(3) Position

Unique reference to the hardware topology.

(4) Activation criterion 1, (5) Activation criterion 2

- None: The indicator is not activated.
- Boolean function: The indicator is activated if the Boolean function is true.
- Collective criterion: The indicator is activated if the collective criterion selected is true.
- Element status: The indicator is activated if the previously defined state of the selected element is true.

Settings for each activation criterion:

- Indicator activation Inactive/Steady/Flashing
- Buzzer activation None/Alarm tone/Fault tone.
- Indicator colour "yellow/red" activation colour (partial indication maps only)

2.7.17 Printers

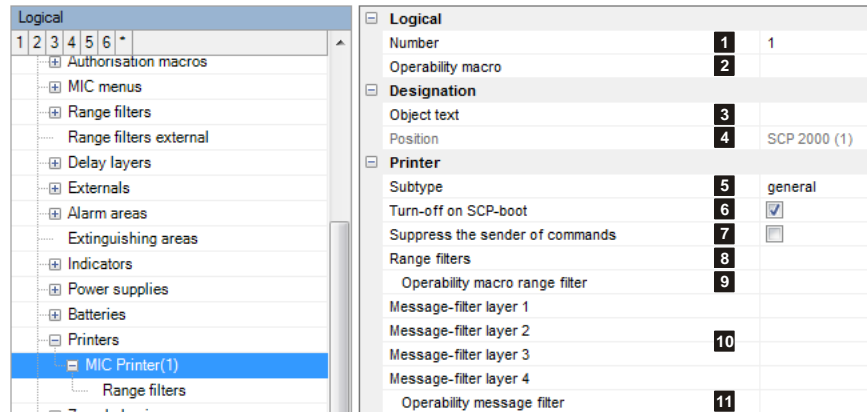
Physical view, logical view

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.



(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Subtype

Selection: "general" / "MIC printer" / "Remote printer"

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(6) Turn-off on SCP boot

If this function is activated, the printer is switched off if the SCP is rebooted.

(7) Suppress the sender of commands

Example for a printout. If the option is activated, the *text in italics* is not printed:

```
TURN ON
PRINTER 1
BY
OPERATING PANEL 1/1
Customer_Level_2
10.12.12 08:31:46
```

(8) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(9) Operability macro range filter

The operability of this element can be restricted using the operability macro. This operability macro refers to the operability of the range filter.

(10) Message filter

Message filters are used to allow or suppress the printout of certain messages or commands on printers. Up to 4 different message filters can be assigned to each printer. The control panel is used to switch over the message filters.

Assignment example:

- Message filter level 1: Default filter
- Message filter level 2: Maintenance filter; only maintenance alarms are printed out
- Message filter level 3: freely available
- Message filter level 4: freely available

(11) Operability message filter

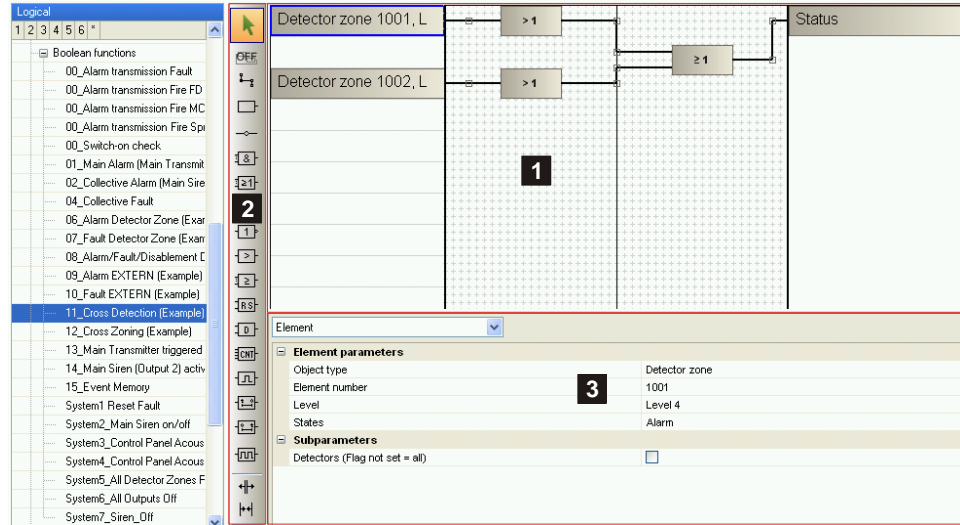
The operability of this element can be restricted using the operability macro.

This operability macro refers to the operability of the message filter switchover.

2.7.18 Boolean functions

[Physical view, logical view]

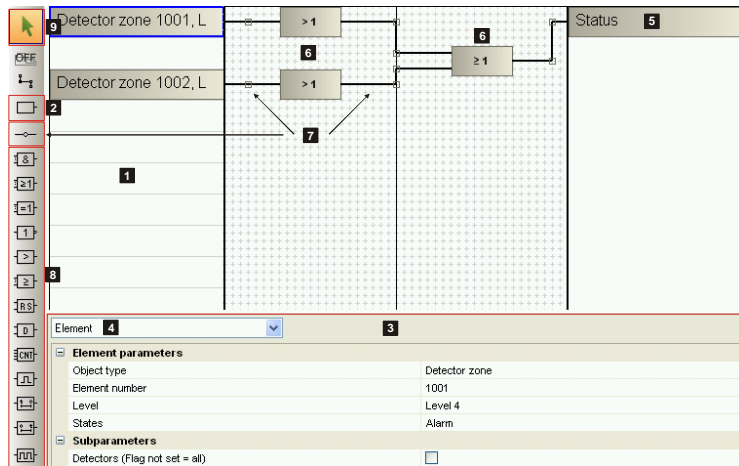
The editor for creating logical connections consists of the drawing area (1) in the middle, the toolbar (2) on the left, and the properties table (3) below.



The drawing area is divided into three parts: The left side (1) is for defining entry criteria. If the toolbar of the input mode (2) is activated, an input criterion can be created by clicking an empty field (1). You can set its properties in the properties table (3) below the drawing area.

Here you can also define the type of input criterion (4). The following are available:

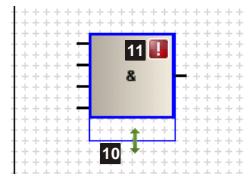
- Constant
- Element
- Collective criteria
- Date/Time
- Command
- Boolean function
- Event SecuriLan



On the right side is the event icon (5) of the Boolean functions.

In the middle, logical gates (6) can be added and associated with the input and output criteria (7). To add a logical gate, its button (8) has to be activated in the toolbar. Clicking once in the middle area creates the gate. The individual elements can be selected by clicking them in selection mode (9). The properties of the selected element appear under the drawing area. The Delete key deletes the elements.

















For some gates the number of inputs can be changed by selecting and dragging (10).








Incomplete entries result in an error. It is displayed not only in the Error list, but also an error icon (11) appears on the faulty element in the drawing area.

Notice:
All input criteria as well as the inputs and outputs of the logical gates must have a connection. If this is not the case, an error is entered in the Error list.

Functions of the Boolean editor

	Selection mode	In selection mode you can select and edit elements in the drawing area.
	AutoRoute	Toggles AutoRoute on and off. If it is activated, the connections are generated with horizontal and vertical lines. If it is deactivated, the connections are drawn directly between start and target.
	Connections	When the connection mode is active, existing elements can be connected. If it is not possible to connect the desired element, the mouse pointer becomes a forbidden sign.
	Input	In input mode, clicking an empty field in the left area creates an input criterion.
	Inverter	The inverter can be used to invert an input or output on a logical gate. The inversion is indicated by a circle and placed on the desired input or output of the gate.
	AND operator	The output of an AND gate takes on the value 1 if the value 1 is on each of its inputs.
	OR operator	The output of an OR gate takes on the value 1 if the value 1 is on at least one of its inputs.
	EXCLUSIVE-OR operator	The output of the EXCLUSIVE-OR gate takes on the value 1 if an odd number of its inputs have the value 1.
	NOT operator	The output of the NOT gate always takes on the opposite value of its input.
	Greater than operator	The output of the greater than gate takes the value 1 only if the value of the input variable is > X.
	More than operator	The output of the more than gate takes the value 1 if at least x inputs have the value 1.
	RS flip-flop	The RS flip-flop serves as temporary storage for logical information. The output takes on the value 1 if the value 1 is on the S input. The output now includes the value 1 regardless of the state of the S input; only if value 1 is on the R input is the RS flip-flop reset and 0 is again on the output.
	D flip-flop	The output takes on the value of the 1D input if the value 1 is on the C input. The output remains in this state until the next 0 to 1 transition of the C input. The C input is also called clock input.
	Counters	The counter enables ascending and descending counting. Every time the +input (counter input forward) takes on the value 1, the counter is increased by 1. Every time the -input (counter input backward) takes on the value 1, the counter is decreased by 1. If the value 1 is on the R input (reset input), the counter is set to 0. If the value 1 is on the S input (set input), the counter is set to 255. Setting has priority over counting and resetting has priority over setting.
	Impulse	The output takes on the value 1 if the value 1 is on the input. The output retains this value for the programmable time (= pulse duration) regardless of the state of the input.
	Positive slope	If the value on the input of the "positive slope" changes from 0 to 1, the output also changes to 1 after a programmable delay time. If, however, the value on the input of the "positive slope" changes from 1 to 0, the change from 1 to 0 on the output is not delayed.

	Negative slope	If the value on the input of the "negative slope" changes from 0 to 1, the output changes immediately to 1. If, however, the value on the input of the "negative slope" changes from 1 to 0, the change from 1 to 0 on the output occurs after a programmable delay time.
	Clock generator	If the value 1 is on the input, an impulse sequence begins on the output. The impulse sequence always begins with a full impulse. If the input changes to the value 0, the impulse sequence on the output is stopped after the last impulse has fully completed.
	Add column	Enables adding columns. Clicking in the middle area creates a new column.
	Remove column	In this mode the desired column can be removed.
	Simulation	The logical link can be tested in simulation mode. You can change an input value by clicking an input criterion. This allows you to test scenarios with various input values. Red marked lines stand for the value 1 and blue marked lines for 0. During the simulation, a progress bar below the time elements displays the time until the time element switches. The simulation speed can also be controlled with the time factor. The simulation can be ended by clicking the right mouse button.

2.7.19 Collective criteria

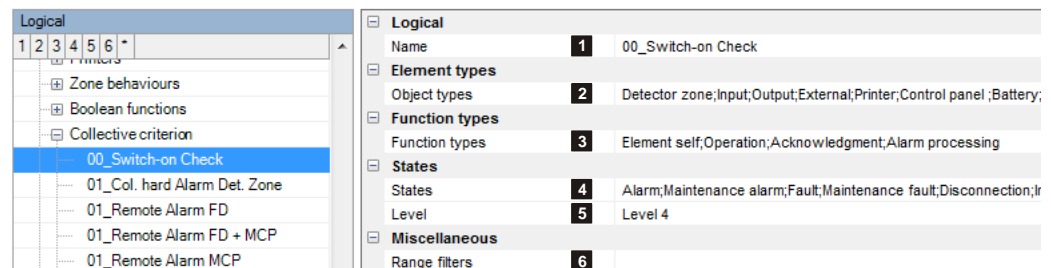
[Physical view, logical view]

Collective criteria are used to poll certain states of groups of elements (e.g. MCP group alarm, group fault, disablements, etc.). They can then be re-used as "input criterion" for Boolean functions or to activate indicators.

If the selected state matches at least 1 element and function type (corresponds to an OR link), the collective criterion is logical 1 (true/high). A sensible selection of collective criteria greatly facilitates the programming of Boolean functions.

(1) Name

User-definable text used for identifying the element.



(2) Element types

Object type:

In the list of all the element types available, those required are checked.

If only 1 element type is selected, at least 1 sub-element type must be specified for it.

If more than 1 element type is selected, all the available sub-element types are automatically selected.

All the element types can also be selected at once.

Sub-type:

If only 1 element type is selected, individual sub-element types can be selected for that element type (e.g. detection zone -> manual call point). All the sub-element types can also be selected at once.

(3) Function types

In the list of all the function types available, those required are checked. With a few exceptions the "Element itself" function type is to be selected.

(4) States

State:

In the list of all the available states, those required are checked.

If only 1 state is selected, at least 1 sub-state must be specified for it.

If more than 1 state is selected, all the available sub-states are automatically selected.

Sub-state:

If only 1 state is selected, individual sub-states can be selected for that state (e.g. disablement -> fire brigade map). All the sub-states can also be selected at once.

(5) Level

If a (sub-)state is able to have several levels, the required level must be specified. If not, the value must be set to 1.

(6) Range filters

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

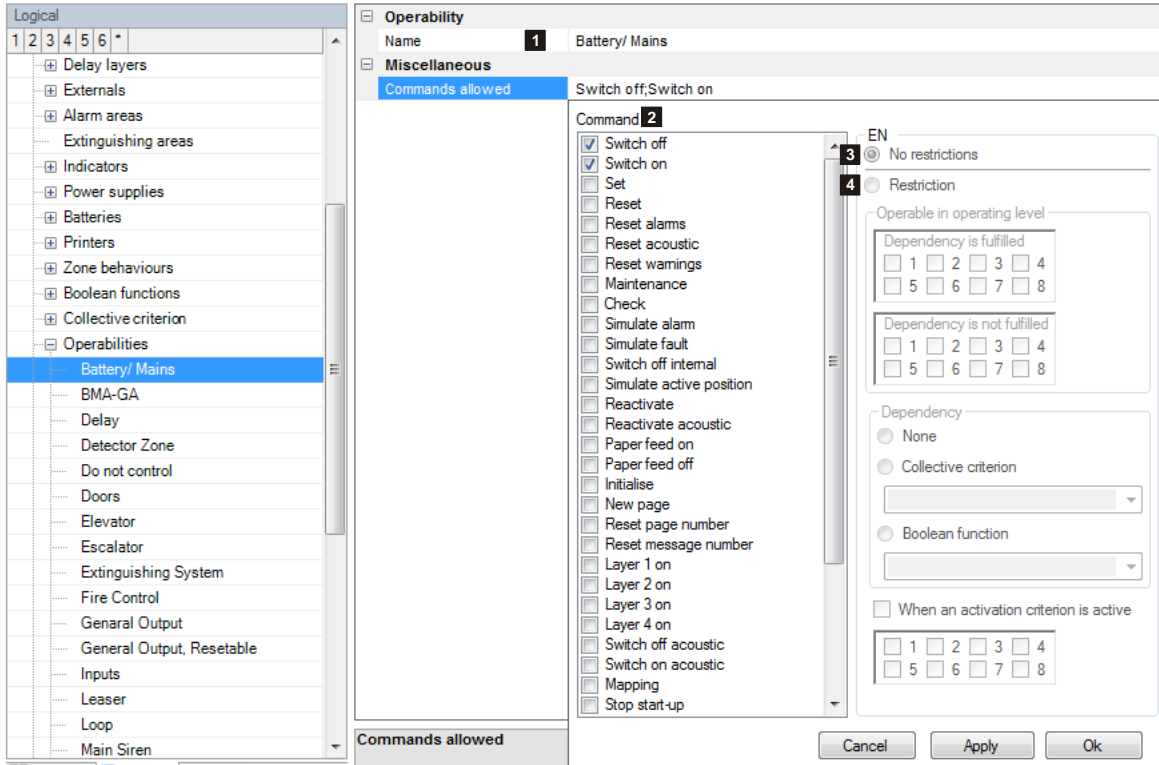
The collective criterion can be restricted to a particular value range by one or more range filters.

2.7.20 Operability macro

[Physical view, logical view]

Operability macros are used to restrict the operability of elements within an SCP or within a SecuriLan at the command level. Applicable to logical elements such as loops, detection zones, outputs, inputs, indication and control maps, delay layers, external, extinguishing area, power supply units, batteries, etc.

Example: In the "Loop" operability macro it is possible to reset the loop to operating levels 3 and 8 if there is no loop fault. However, if the loop has a fault, the loop can only be reset to operating level 8.



(1) Name

User-definable text used for identifying the element.

(2) Command

The command input field is used to select the commands whose application is to be restricted at the various operating levels.

(3) No restrictions

If this criterion is assigned to a command, the command applies without restriction at every operating level.

(4) Restrictions

If this criterion is assigned to a command, the command is restricted in its application to the operating levels specifically enabled.

In addition, a dependency can also be defined. The command can then only be executed at the defined operating levels if the dependency is fulfilled or not fulfilled.

If an activation criterion is active:

Indicates the operating level at which the command is permissible. This parameter is used only if the activation criterion is active and operation is to be enabled. This criterion applies to outputs only.

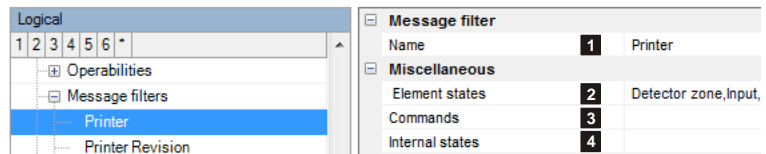
2.7.21 Message filter

[Physical view, logical view]

Message filters are used to allow or suppress the printout of certain messages or commands on printers. Up to 4 different message filters can be assigned to each printer.

(1) Name

User-definable text used for identifying the element.



(3) Commands

Under normal circumstances (i.e. no message filters in use) printers output two messages after a command is entered on an indication and control map:

- The first message is for the command that was entered.
- The second message is for the acknowledgement that the command has been executed.

To save time and paper, the printout of the commands can be suppressed as, generally speaking, it is sufficient that the acknowledgements are printed out.

(2) Element states

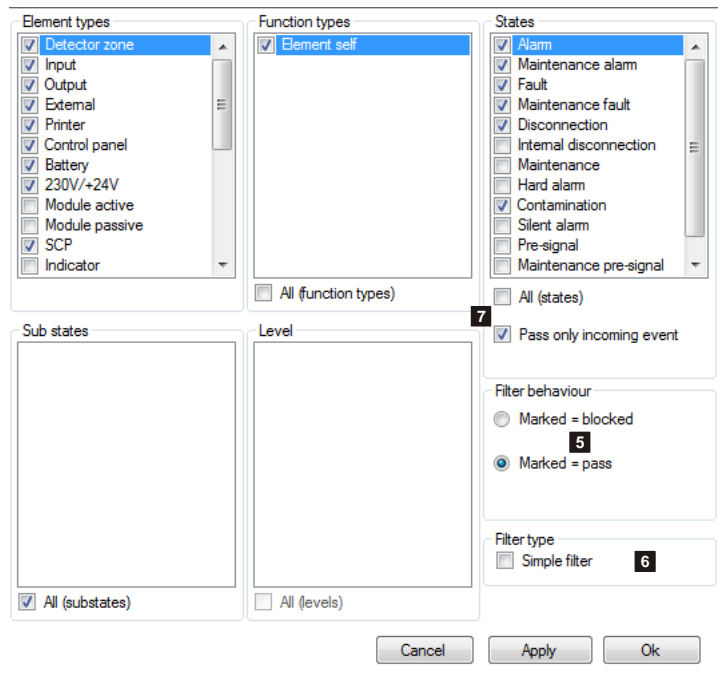
The states of the elements that are to be enabled (or blocked) are defined here.

In the example below, only alarms are to be printed out for the detection zone element type.

The parameters of the message filter are set in such a way that only the alarm state of the detection zone element type passes through the filter.

This message filter can be assigned to one (or more) printer(s).

Make sure the settings (5) Filter behaviour and (6) Filter type are selected first before the remaining settings are made.



(4) Internal states

Internal states comprise the "warm start" state, which can either be blocked or allowed. This state is signalled if the SCP in question flips from A-side to B-side due to various hardware errors (e.g. defective hardware, incorrectly planned hardware, etc.).

5) Filter behaviour

The filter's global behaviour is specified here.

Marked = blocked:

Unchecked elements are allowed to pass through. Those that are to be blocked are checked.

Marked = pass:

Unchecked elements are blocked. Those that are to be allowed to pass through are checked.

(6) Filter type

The "Simple filter" setting groups all the element types and function types together.

(7) Pass only incoming events / Block only outgoing events

The text of this option varies depending on the setting of the (5) Filter behaviour.

Elements states for message filter:

Please note that every state change comprises the following 2 messages (for the example in question):

1. Incoming event = alarm. State transition from quiescent → alarm
2. Outgoing event = quiescent. State transition from alarm → quiescent

2.7.22 Message

[Physical view, logical view]

A message can be used to plan the automatic execution of virtually all the commands based on a particular event (Boolean function); those are commands which can also be carried out manually on the control panel of the fire alarm control system (message type = command).

It is also possible to plan telegrams in the internal data format of the fire alarm control panel (message type = text). This option is not documented here; contact the Securiton Technical Support if required.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Name

User-definable text used for identifying the element.

(3) Message type

Choice between "Command" and "Text". See explanation under section 2.7.22.

(4) Trigger

Selects a Boolean function for activating this message.

(5) SCP

Assignment to an SCP

Logical	
1	2
Delay layers	
Externals	
Alarm areas	
Extinguishing areas	
Indicators	
Power supplies	
Batteries	
Printers	
Zone behaviours	
Boolean functions	
Collective criterion	
Operabilities	
Message filters	
Messages	
System1_Inspection_Start	
System2_Control panel Acoustics stop	
System3_FAT acoustics stop	
System4_All Detector Zones Revision	
System5_All Outputs Off	
System6_All Outputs Off	
Network events	
Master systems	
Hauptzentralen	
Connections	
Extinguishing systems	
Inspection zones	
Display/operation panels	
External systems	

Message	
Number	1
Name	System1_Inspection_Start
Message type	<input checked="" type="radio"/> Command <input type="radio"/> Text
Trigger	System7_Siren_Off
SCP	SCP 2000(1)
Trigger active	
Active	<input checked="" type="checkbox"/>
All element types	<input type="checkbox"/>
Element type	Intervention
Function type	Element self
All element-numbers	<input checked="" type="checkbox"/>
From element-number	0
To element-number	0
All display groups	<input type="checkbox"/>
From display group	0
to display group	0
Command	Reset
Operating level	8
Range filter	9
Priority	<input checked="" type="radio"/> Low <input type="radio"/> High
Reactivation	<input type="checkbox"/>
Trigger passive	
Active	<input type="checkbox"/>
All element types	<input checked="" type="checkbox"/>
Element type	Detector zone
Function type	Element self
All element-numbers	<input checked="" type="checkbox"/>
From element-number	0

(6) Trigger active

This category defines the command which is sent during the state transition from trigger passive => active.

(7) Element/command

Selects the elements and the command.

(8) Operating level

Defines the operating level with which the command is sent. This is crucial if operation macros are stored under elements. Depending on the operating level the command is then applied to the corresponding element or not.

(9) Range filters

A range filter can be assigned if the command is to be carried out for several elements.

(10) Priority

Default = low. In the event of several messages occurring simultaneously those with a higher priority are processed as a matter of priority (e.g. alarms).

(11) Reactivation

Once the "Reset" command has been applied, there is the possibility of planning whether reactivation by another activation criterion should be possible if and when an activation criterion is imposed.

(12) Trigger passive

This category defines the command which is sent during the state transition from trigger active => passive.

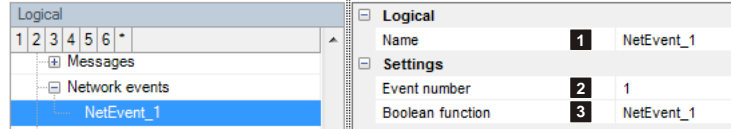
2.7.23 Network event

[Physical view, logical view]

A network event is used for control operations over and beyond the scope of SecuriLan. Events can be evaluated and linked by both the management system and SecuriWan servers. SecuriFire can also evaluate events using input criteria in Boolean functions.

(1) Name

User-definable text used for identifying the element.



(2) Event number

This number is used to identify the network events in other devices. (e.g. Boolean functions in another SCP or SecuriWAN server)

(3) Boolean function

The network event is triggered if the Boolean function used here becomes true.

2.7.24 Master system

[Physical view, logical view]

The settings for the Master system logical element are used to define the interface from the management system to the SecuriFire system.

(1) Number

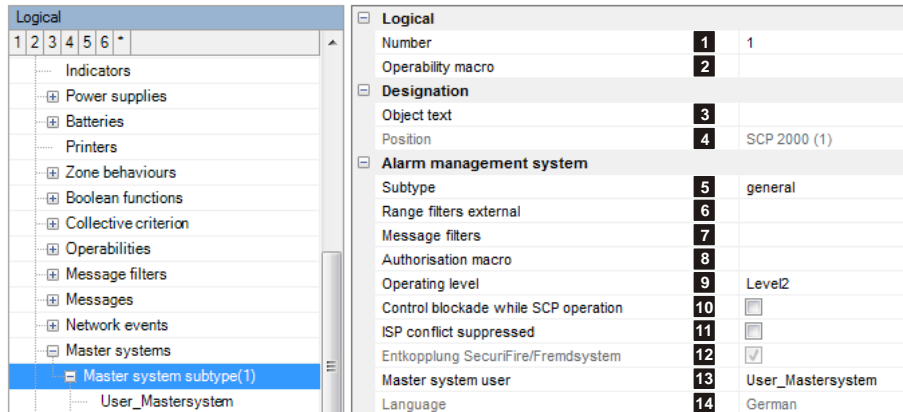
Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.



(4) Position

Unique reference to the hardware topology.

(5) Subtype

Each master system can be assigned a "sub-type" (e.g. general, management system, alarm server).

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(6) Range filters external

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(7) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(8) Authorisation macro

An authorisation macro indicates which logical elements (e.g. detection zones, outputs, etc.) and which logical commands (e.g. switch on, switch off, reset, etc.) are visible and can be operated at the various authorisation levels. This means different authorisations can be assigned for different management systems.

(9) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(10) Control blockade while SCP operation

If this option is set, the logical elements (e.g. detection zone, etc.) can only be operated via the connected management system. Operation via the SecuriFire control panels is then no longer possible.

(11) ISP conflict suppressed

A fault occurs if the software version of the management system does not match the SCP. Activating this option deactivates the check of the software version between management system and control panel..

(12) Decoupling SecuriFire/external system

If this option is set (default), all messages to the external system are temporarily buffered before they are sent. Buffer overflows may occur if the connections to the external system are slow. If this option is not set, all messages are sent directly to the external system.

(13) Master system user

The master system must be assigned an authorised user. The user has to be created beforehand, see section 2.7.8 Users.

(14) Language

Specifies the language for the system texts.

2.7.25 External system

[Physical view, logical view]

The settings for the External system logical element are used to define the interface from the management system to the SecuriFire system.

(1) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

(2) Operability macro

The operability of this element can be restricted using the operability macro.

Logical		
Number	1	1
Operability macro	2	
Designation		
Object text	3	
Position	4	SCP 2000 (1)
External system		
Subtype	5	general
Range filters external	6	
Message filters	7	
Authorisation macro	8	Berechtigungen_1
Operating level	9	Level2
Control blockade while SCP operation	10	<input type="checkbox"/>
ISP conflict suppressed	11	<input type="checkbox"/>
Entkopplung SecuriFire/Fremdsystem	12	<input checked="" type="checkbox"/>
Master system user	13	User_Mastersystem
Language	14	German

(3) Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

(4) Position

Unique reference to the hardware topology.

(5) Subtype

Each master system can be assigned a "sub-type" (e.g. general, management system, alarm server).

The subtype is indicated on the control panel display of the fire alarm control panel. The subtype can also be used as an input condition for collective criteria for example.

(6) Range filters external

Range filters are used to group elements (such as detection zones, outputs, etc.) from one SCP or across several SCPs into sub-ranges. A range filter can then be taken into account (e.g. for limiting displays on control panels and printers) for the definition of collective criteria, etc.

(7) Message filter

Message filters are used in order to define which messages or commands shall be enabled or disabled..

(8) Authorisation macro

An authorisation macro indicates which logical elements (e.g. detection zones, outputs, etc.) and which logical commands (e.g. switch on, switch off, reset, etc.) are visible and can be operated at the various authorisation levels. This means different authorisations can be assigned for different management systems.

(9) Operating level

The operating level for this device is determined here. It is relevant to all the operations made on the panel. For example a reset is carried out with the corresponding operating level and can only reset an output if it does not require a higher operating level.

(10) Control blockade while SCP operation

If this function is activated, the logical elements (e.g. detection zone, etc.) can only be operated via the connected management system. Operation via the SecuriFire control panels is then no longer possible.

(11) ISP conflict suppressed

A fault occurs if the software version of the management system does not match the SCP. Activating this option deactivates the check of the software version between management system and control panel.

(12) Decoupling SecuriFire/external system

If this option is not set (default), all messages to the external system are temporarily buffered before they are sent. Buffer overflows may occur if the connections to the external system are slow. If this option is not set, all messages are sent directly to the external system.

(13) Master system user

The master system must be assigned an authorised user. The user has to be created beforehand, see section 2.7.8 Users.

(14) Language

Specifies the language for the system texts.

For external system type „ESPA“ additional parameters appear. Refer to 2.7.25.1

For external system type „Remote Message Server“ additional parameters appear. Refer to 2.7.25.2.

2.7.25.1 ESPA

For the external system type „ESPA“ the following additional parameters appear:

(1) Syntax display message

In the ESPA setting (see 2.4.16.3 ESPA) one of the following options can be selected:

- User-defined (the field is editable)
- FAT ReGraph
(Setting: sa1se1 EN5/IN3 ct114)
- Display 12 characters with detector number
(Setting: sa7 se4 EN5/IN3 ct103)
- Display 12 characters without detector number
(Setting: sa7 se4 ct115)
- Display 16 characters with detector number
(Setting: sa10 se4 et5. EN5/IN3ct95)
- Display 16 characters without detector number
(Setting: sa10 se4 et10 ct108)
- External system
(Setting: sa8 se4 et2 EN5/IN3 ct105)

Syntax for the message on the display:

Keyword 1 + number of digits 1 + separator 1 + Keyword 2 + number of digits 2 + Separator 2 + ...

Example from the screenshot „sa10 se4 et5. EN5/IN3ct95“:

sa10 → State (ALARM) 10 digits. Is transmitted only when under (4) the option "Coming" is selected.

Character "space"

se4 → State end (END) 4 digits. Is transmitted only when under (4) the option "Going" is selected.

Character "space"

et5. → Element type (DZ) 2 digits

Characters "dot", "space"

EN5/IN3 → Element number/Indicator number

ct95 → Object text 95 digits

16 Characters										16 Characters										6 * 16 Characters																			
sa10										se4				et5		.	EN5				/	IN3		ct95															
A	L	A	R	M						E	N	D					D	Z					.	x	x	x	x	x	/	x	x	x	O	b	j	e	k	t	

	Keyword (numeric)	Keyword (alphanumeric)	maximum number of digits for numerical output
ElementType	ET	et	3
FunctionType	FT	ft	2
SubType	ST	st	2
NetworkNumber	NN	-	3
ElementNumber	EN	-	5
IndicatorGroupNumber	IN	-	3
State	SA	sa	3
StateEnd	SE	se	1
SubState	SS	ss	2
Level	LV	lv	2
Time (Hour)	TH	-	2
Time (Minute)	TM	-	2
Time (Second)	TS	-	2
Date (Year)	DY	-	4
Date (Month)	DM	-	2
Date (Day)	DD	-	2
CustomText	-	ct	-
SpecialCustomText	-	sc	-

(2) Events

Here you can select which events are transmitted:

- Alarms: all elements can report alarm, such as: detectors, external, ...
- Faults: all elements that can go into a fault condition
- further: are all conditions which various elements can assume, such as: input active, etc.

In order to limit the messages, there is the possibility to add a message filter or a range filter.

Refer to 2.7.25 External system.

(3) Settings

Record type	Data	Meaning
Call Address	max 16 Characters	Address of the pager or a group of pagers
Beep Code	0	Reserved
	1 ... 9	System dependant
Call Type	0	Reserved
	1	Reset (cancel) call
	2	Speech call
	3	Standard call
Transmissions	0	Reserved
	1	1 transmission
	2	2 transmission
	etc	etc
Priority	0	Reserved
	1	Alarm (Emergency)
	2	High
	3	Normal

(4) Coming / Going

Coming (default): Event for status active → Status (eg. alarm) active

Going : Event for status passive → Status (eg. alarm) end

(5) Diagnose string

The diagnostic string is used to test the transmission and can be triggered via

- SecuriFire Studio > ServiceCenter > External system > Check.
- MIC > ELEMENTS > EXTERNAL SYSTEM > CHECK

2.7.25.2 Remote Message Server and Remote Message E-mail

The following parameters also appear with the external system type "Remote Message Server":

The following parameters also appear with the external system type "Remote Message E-mail":

RMS		
Further messages	1	<input checked="" type="checkbox"/>
Fault messages	2	<input type="checkbox"/>
Alarm messages	3	<input type="checkbox"/>
Send state-end message	4	<input type="checkbox"/>
Polling time enable	5	<input checked="" type="checkbox"/>
Polling time	6	01:00:00
Client port	7	0
Internet address client	8	
User name client	9	
Password client	10	

RME		
Send state-end message	4	<input type="checkbox"/>
Polling time enable	5	<input checked="" type="checkbox"/>
Polling time	6	00:01:40
Delay time enable	11	<input checked="" type="checkbox"/>
Delay time [hh:mm:ss]	12	00:00:05
Client port	7	0
Internet address client	8	
User name client	9	
Password client	10	
Code page	13	CP850 (Multilingual Latin I)
E-mail addresses and texts	14	none

(1) Further messages

All the other messages are sent.

(2) Fault messages

All the fault messages are sent.

(3) Alarm messages

All the alarm messages are sent.

(4) Send state-end message

A message is also sent when the corresponding state (e.g. fault) ends.

(5) Polling time enable, (6) Polling time

The connection to the server is checked at defined intervals.

(7) Client port

Destination port on the remote server.

(8) Internet address client

Address of the remote server.

(9) User name client, (10) Password client

User name and password for access to the remote server.

(11) Delay time enable, (12) Delay time

After an email is sent a delay is inserted before the next email is sent.

(13) Code page

Character set used for the emails.

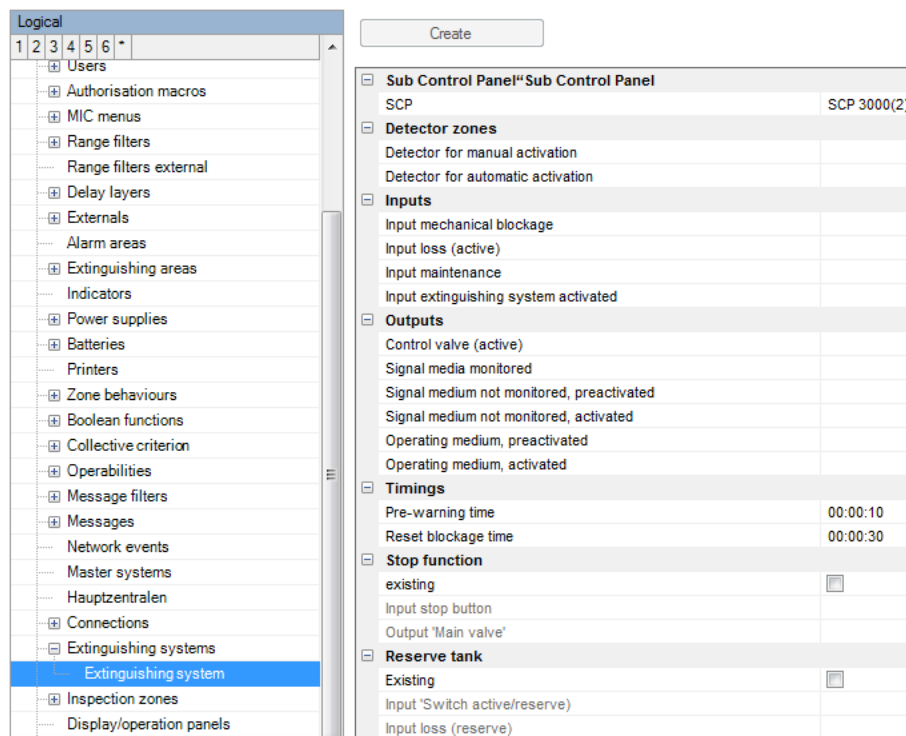
(14) E-mail addresses and texts

Email recipients and email texts are entered in this dialog box.

2.7.26 Extinguishing system

[Physical view, logical view]

The topic “Extinguishing system” is described in a separate document: SF3000_SD_ECP_FEP_T811053.

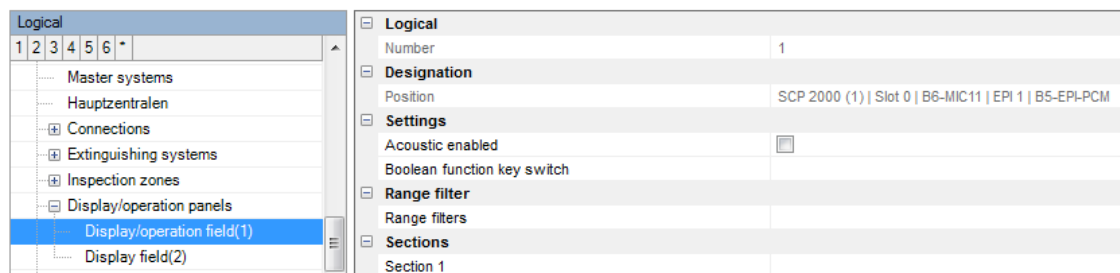


2.7.27 Indication and control maps

[Physical view, logical view]

The following device types are listed under this view:

- B5-EPI-PCM (see section 2.6.6)
- B5-EPI-PIM (see section 2.6.5)



2.7.28 Acoustic macro

Physical view, logical view

Acoustic macros are used for text message output on the MCD573X-SP and MCD573X-SPCT detector types.

The output of the acoustic macro is made in the following format and sequence:

1. Sequence 1 ((acoustic signal) * (number of repetitions+1)) + pause
2. Sequence 2 ((acoustic signal) * (number of repetitions+1)) + pause
3. Sequence 3 ((acoustic signal) * (number of repetitions+1)) + pause
4. Sequence 4 ((acoustic signal) * (number of repetitions+1)) + pause

Selection of the number of acoustic macro repetitions (endless, 1x, 2x, 3x) is made in the output projection under “Output behaviour”.

(1) Name

User-definable text used for identifying the element.

(2) Number

Unique number of the logical system object. Permissible value range 1 ... 65535

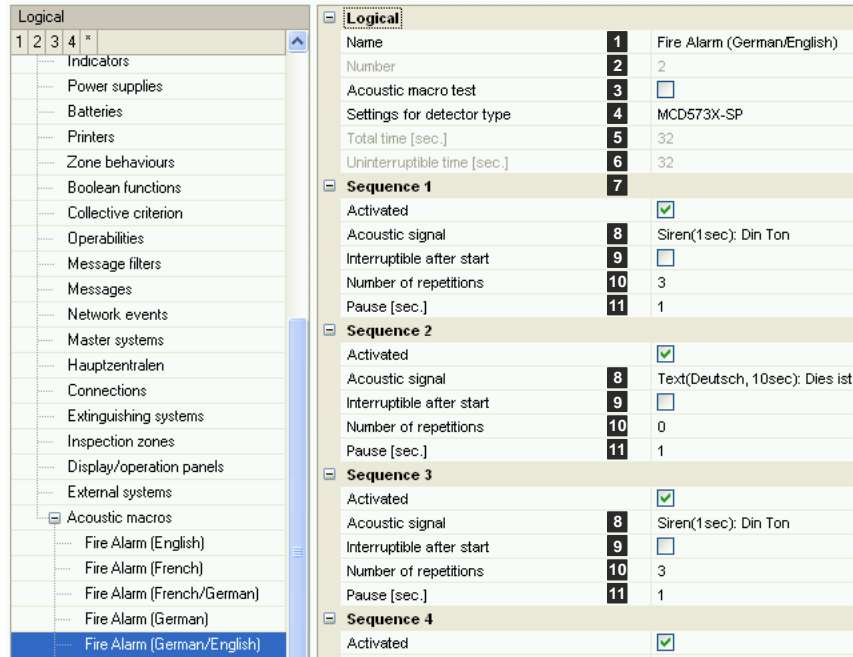
(3) Acoustic macro test

This option must be set for exactly one of the acoustic macros.

This acoustic macro can be triggered for test purposes in the ServiceCenter by using the “Test” command and entering the detection zone and detector number (e.g. 1001/3).

(4) Settings for detector type

Selection between “MCD573X-SP” and “MCD573X-SPCT”



(5) Total time [sec.]

Total of the times, sequence 1+ sequence 2+ sequence 3+ sequence 4.

(6) Uninterruptible time [sec.]

During this time, the acoustic macro cannot be interrupted. This must be taken into account during alternating activation, see Chap. 2.3.4 General settings“

(7) Sequence 1-4

Up to four different sequences can be projected for outputting text messages/siren tones.

(8) Acoustic signal

One of 12 text messages or 4 siren tones is selected here.

(9) Interruptible after start

(10) Number of repetitions

Setting 0: The “Acoustic signal” is output, then the “Pause” and then the transition to the next “Sequence”.

Setting 1: The “Acoustic signal” is output twice, then the “Pause” and then the transition to the next “Sequence”.

Setting 2: The “Acoustic signal” is output three times, then the “Pause” and then the transition to the next “Sequence”.
etc.

(11) Pause [sec.]

Setting of the pause between two sequences.

2.8 Loop configuration

Explanations relating to this main step can be found in the Online Help.

This section explains the parameters of the SecuriLine eXtended participants.

These parameters can occur in the following participants:

ASD515, ASD535, BX-AIM, BX-ESL, BX-FOL, BX-I2, BX-IM4, BX-IOM, BX-MDH, BX-MDI8, BX-O1, BX-O2I4, BX-OI3, BX-REL4, BX-RGW, BX-SOL, CCD573X, DOW, LKM593X, MCD573X-x, MCP5xx, SCD573, SDI, SDF(XLM), SMF, SSD, STD531, TCD573, UTD531

Notice: The BA-yyy modules, which are not compatible with SecuriLine eXtended, are not documented.

Each participant can be programmed individually. The individual parameters are structured into categories.

Example for the "Detector" category:

Category = Chapter	Detector	
Parameters for this category	Detection zone	1001
	Detector number	1
	Alarm level	Value 4
	Sensor behaviour, Night mode	Temperature only
	Sensor behaviour, Day mode	Temperature & smoke
	Heat category	A1
	Inverted	<input checked="" type="checkbox"/>
	Parameter set	
	Monitored	<input checked="" type="checkbox"/>
	Minimum periphery voltage	20

The participants can be divided up into 3 subgroups:

- Detectors and special detectors
- Input modules
- Output modules

2.8.1 Detectors and special detectors

The participant types belonging to this group are underlined:

ASD515, ASD535, BX-AIM, BX-ESL, BX-FOL, BX-I2, BX-IM4, BX-IOM, BX-MDH, BX-MDI8, BX-O1, BX-O2I4, BX-OI3, BX-REL4, BX-RGW, BX-SOL, CCD573X, DOW, LKM593X, MCD573X-x, MCP5xx, SCD573, SDI, SDF(XLM), SMF, SSD, STD531, TCD573, UTD531

Example: MCD573X

System	Edit	Add new	Length check	Priordata	External c
Detector					
Detector zone				1002	
Detector number				1	
Alarm level				Level 4	
Detection behaviour night-mode				Temperature and smoke	
Detection behaviour day-mode				Temperature only	
Temperature					
Heat class				A1	
Heat class index				None	
Smoke					
Pre-signal threshold				50% (MCD573: 30%)	
Pre-signal status				Pre-signal	
Pre-signal level				Level 1	
Smoke sensitivity				normal	
Alarm output PI					
PI-Link					
X-line alarm current				1 mA	
Acoustic				<input type="checkbox"/>	
Alarm area					
Coupling LED => PI output				<input checked="" type="checkbox"/>	
Slave properties					
Slave type				36	
SW-Release				1	
Miscellaneous					
Description				MCD573X see description	
Object text					
Serial number					
Article number					
Participant not configured				<input type="checkbox"/>	

Category general

Detector mode

Selection between “Detector”, “Technical alarm CO” and “Detector + Technical alarm CO”.

The function “Technical alarm CO” according to EN 50291-1 is dependent on the logical element detector.

The “Technical pre-signal CO” is displayed with the “Pre-active input” state, and the “Technical alarm CO” with the “Input active” state.

Detector category

Detection zone

Assigns a detection zone previously configured on this loop.

Detector number

Inputs the detector number within the detection zone.

Alarm level

Selects the value for the alarm.

Detector sensitivity

Choice of setting: "Normal", "Reduced" or "Increased"

Sensor behaviour, Night mode / Sensor behaviour, Day mode

Different detection behaviour parameters can be set for Night operation and Day operation of the detector. Different settings are available depending on the detector type.

MCD573(X):

Temperature & smoke, Temperature only, Smoke only.

CCD573X:

- EN54-7 CUBUS 1: Smoke, CUBUS levelling for temperature
- EN54-7 CUBUS 2: Smoke, CUBUS levelling for temperature and CO
- EN54-5 Cl. A1: Temperature, Class A1
- EN54-5 Cl. A2: Temperature, Class A2
- EN54-5 Cl. B: Temperature, Class B
- EN54-26: CO > 40ppm
- EN54-29: Smoke, algorithm for smoke and temperature
- EN54-30: Temperature, algorithm for temperature and CO

Heat category

Selects the heat category (A1,A2,B).

Notice: Although heat detectors UTD531-x and TCD573-x correspond to one heat category (see corresponding data sheet) they can be reprogrammed up or down by one category.

Heat category index

Selects the index for the heat category (none, R, S).

- none: corresponds to the standard differential behaviour according to EN 54-5
- "R" index: well suited for applications in which the ambient temperature may be subject to considerable fluctuations yet high rates of temperature rise are not sustained for long periods (e.g. drafts, unheated rooms).
- "S" index: well suited for applications with higher rates of temperature rise over longer periods of time (e.g.: boiler rooms or kitchens).

Inverted

The function can be inverted here.

Monitored

Monitoring of wire breakage.

Minimum periphery voltage

A fault is triggered below this threshold

Parameter set (OI3)

Selecting the connected special fire detector.

Automatic adjustment (BX-OI3)

Possibility of automatic adjustment by selecting a predefined detector tolerance.

Alarm 2

This is a highly insensitive alarm. The "Alarm2" signal from an ASD535 can be evaluated either as a value 4 "alarm" state or as a "technical alarm".

Evaluate pre-signal

Activates or deactivates the evaluation of the pre-signal.

Pre-signal X (1,2,3) state

Pre-signal X from the detector is evaluated either as an alarm or as a pre-signal.

Pre-signal X (1,2,3)

Selection for the pre-signal X from the detector: "Do not forward" or forward as value Y.

Category Technical alarm CO

Input for technical alarm CO

Assignment of a previously defined input for the technical alarm CO.

Threshold value for technical pre-signal CO (ppm = parts per million)

Setting of the threshold value from 20 ppm (very sensitive) to 320 ppm (not sensitive) for triggering a technical CO alarm, based on EN 50291-1. Examples:

- > 50 ppm longer than 75 minutes
- > 100 ppm longer than 25 minutes
- > 300 ppm longer than 2 minutes

Pre-signal category

See under section **Detector category**

Temperature category

Heat category

See under section **Detector category**

Smoke category

Pre-signal threshold

Choice of setting: "Do not forward", 50%, 75% of alarm threshold

Smoke sensitivity

Choice of setting: "Increased", "Normal", "Reduced", "Greatly Red." in accordance with the detector's data sheet.

Category smoke channel "Night operation"

Settings for smoke alarm and smoke pre-signal in night operation

Category temperature channel "Night operation"

Settings for heat alarm and heat pre-signal in night operation

Category CO channel "Night operation"

Settings for CO alarm and CO pre-signal in night operation

Category smoke channel "Day operation"

Settings for smoke alarm and smoke pre-signal in day operation

Category temperature channel "Day operation"

Settings for heat alarm and heat pre-signal in day operation

Category CO channel "Day operation"

Settings for CO alarm and CO pre-signal in day operation

Category Detector acoustic**Activation behaviour**

The activation behaviour of the sirens or text message can be specified as follows:

None: The detector acoustic is never activated.

Output: The detector acoustic is assigned to a logical output. The output must be reserved in the planning of the loop beforehand under output type 4 or type 5. Selection of the sound type is made in the output planning under "Output behaviour".

Alarm output: The detector acoustic is assigned to the alarm output of the detector. The sound type is then selected immediately below.

Output

Assigns an input previously configured on this loop.

Volume

Choice of "Low", "Medium" and "High".

Category alarm output PI**PI link**

Selects the detection zones which activate this detector's alarm output in the event of an alarm.

X-Line alarm current

The current of the alarm output is limited short-circuit-proof to the selected value: 5mA, 1mA or 0.1mA

Audible

Option set (high actuation priority): Must be set if an audible device (BX-API, siren of the MCD573X-S) is connected to the alarm output. This ensures that the sirens have enough current and can be actuated.

Please note that the loop length check has to be carried out. The MCDX API-H detector type must be used.

Option not set (standard actuation priority): If an optical indicator (RAL) is connected to the alarm output.

The alarm output is activated only if enough current is available. This depends on the "Alarm current" setting in the tab loop data (Loop configuration/Loop).

Alarm area

Assigns the alarm output to a previously planned alarm area.

Coupling LED => PI output

If the option is set, the detector alarm will activate the alarm output.

Coupling detector acoustic => PI output

Option set: When the sirens are activated through an alarm transmission area, the alarm output is also activated.

Option not set: When the sirens are activated through an alarm transmission area, the alarm output is NOT activated. (For example, when not all RALs should be activated at the same time in an alarm transmission area!)

Category slave properties**Slave type ¹⁾**

Displays the slave type number of the selected loop device.

Software release ¹⁾

Displays the software release of the selected loop device.

Category Miscellaneous

Description

Displays the slave type designation of the selected loop device.

Object texts

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

Serial number, article number ¹⁾

If a loop device has a serial No. or article No. on board and that number was read out, it is displayed here. The readout is carried out using the corresponding function in the "Loop configuration" planning stage.

Device not configured

This option can be set if a module or detector is already integrated into the loop but has not yet been commissioned (e.g. a BX-OI3 if the special detector is not yet at the construction site). It means the module does not trigger any faults even though it is not yet programmed.

Retain local device settings

Option set: The values set in the device are not affected by the FAS.

Option not set: The device takes on the following settings from the FAS:

Smoke sensitivity

Choice of setting: "Normal", "Reduced" or "Increased"

Airflow monitoring sensitivity

Choice of setting: "Normal", "More sensitive" or "Less sensitive"

Airflow monitoring filter time

Choice of setting: "none", "VdS standard", "insensitive" or "highly insensitive"

Object text, second detector

This object can be assigned 3 lines of text and one info text for indication on the display of the indication and control maps. Possibly need to select the corresponding character set under „Tools\Options\Language“.

¹⁾ Notice:

The data in these fields are stored in the project and are therefore available offline. This can be important for any support enquiries or recall actions.

2.8.2 Input modules

The participant types belonging to this group are underlined:

ASD515, ASD535, BX-AIM, BX-ESL, BX-FOL, BX-I2, BX-IM4, BX-IOM, BX-MDH, BX-MDI8, BX-O1, BX-O2I4, BX-OI3, BX-REL4, BX-RGW, BX-SOL, CCD573X, DOW, LKM593X, MCD573X-x, MCP5xx, SCD573, SDI, SDF(XLM), SMF, SSD, STD531, TCD573, UTD531

Example: BX-I2

System	Edit	Add new	Length check	Priordata
Slave properties				
Slave type	49			
SW-Release	0			
Input 1				
Mode	Input			
Input	1001			
Inverted	<input type="checkbox"/>			
Monitored	<input type="checkbox"/>			
Input 2				
Input	<none>			
Inverted	<input type="checkbox"/>			
Input 1 load adjustment				
Adjustment mode	None			
Miscellaneous				
Description	BX-I2 see de			
Serial number				
Article number				
Participant not configured	<input type="checkbox"/>			

Category Slave properties

Category Input

Category Input

Category Input x load adjustment

Category Miscellaneous

Category Input, Door limit switch, Manual release button

Participant behaviour

Choice of "Input", "Detector zone" or "Detector"

Input type

Choice of „Input“, „VdS interface“, „Valve monitoring“ or „Input DFG-60 BLK3“

Line type

Choice of „SecuriStar 521/523/563, LKM583, with pre-alarm“, „SecuriStar 521/523/563, MCP, LKM583, without pre-alarm“, "Series 130 Ex-i", "SLR-E-IS/DCD-1E-IS" or "Series 130 / 52x ARE (ADW, RAS, ERM)"

Input

Assigns an input previously configured on this loop.

Inverted

The function can be inverted here.

Monitored

Monitoring of wire breakage.

Automatic adjustment

Possibility of automatic adjustment by selecting a predefined detector tolerance.

Category general

Tolerance

Admissible deviation from the target value. A fault message is sent if the tolerance is exceeded.

Category input X load balancing

Balancing mode

Choice of "No balancing", "Manual" or "Automatic"

Current value

Measured value

Target value

Reference value for operation.

Tolerance

Admissible deviation from the target value. A fault message is sent if the tolerance is exceeded.

Category slave properties

See under 2.8.1

Category Miscellaneous

See under 2.8.1

2.8.3 Output modules and loop sirens

The participant types belonging to this group are underlined:

ASD515, ASD535, BX-AIM, BX-ESL, BX-FOL, BX-I2, BX-IM4, BX-IOM, BX-MDH, BX-MDI8, BX-O1, BX-O2I4, BX-OI3, BX-REL4, BX-RGW, BX-SOL, CCD573X, DOW, LKM593X, MCD573X-x, MCP5xx, SCD573, SDI, SDF(XLM), SMF, SSD, STD531, TCD573, UTD531

Example: BX-O1

System	Edit	Add new	Length check	Priordata
Output				
Output			1001	
Fail save position			No change	
Slave properties				
Slave type			48	
SW-Release			0	
Miscellaneous				
Description			BX-O1 see d	
Serial number				
Article number				
Participant not configured			<input type="checkbox"/>	

Output category

Output

Assigns an input previously configured on this loop.

Volume

Choice of "Low" and "High"

Flashing

Choice of "Slow" and "Rapid"

Fail-safe position

Choice of "Unchanged", "Open" and "Closed".

Monitored

Monitoring of wire breakage.

Load range

Loads between 20 Ohm and 1k Ohm can be connected. The required range of load must be set here: Range 1: 160 Ohm to 1k Ohm, Range 2: 57 Ohm to 375 Ohm, Range 3: 20 Ohm to 80 Ohm.

Suspend adjustment after activation

Option set: the output responds like a non-adjusted output for 20 minutes after the activation state has ended. Once the time period has elapsed, the original sensitivity of the fault detection is reactivated. This is needed for devices that heat up in the activation state and change their resistance as a result (e.g. relays, etc.).

Category output X load balancing

Balancing mode

Choice of "No balancing", "Manual" or "Automatic"

Current value

Measured value

Target value

Reference value for operation.

Tolerance

Admissible deviation from the target value. A fault message is sent if the tolerance is exceeded.

Category Slave properties / Category Miscellaneous

See under 2.8.1

2.8.4 Loop data

Load adjustment

With the adjustment, the electrical properties of the connected device are determined. This is used for precise fault detection, even when the values only change slowly (e.g. creeping short-circuit).

(1) Adjustment mode

Choice of:

- none
- Manual
- Automatic

[-] Load adjustment		
Adjustment mode	1	Manual
Tolerance	2	6.25%
Actual value	3	0
Actual value SC-drift	4	0
Target value	5	0/0
[-] Alarm current		
Allowable current for alarm LED and PI [mA]	6	20
[-] Basis for calculation		
Loop length measured [m]	7	1000
Resistance of the loop line measured [Ohm]	8	50

Adjustment mode = „none“:

No load adjustment is made.

Adjustment mode = „manual“:

In manual adjustment, the values must be read manually first. These are then saved in the control panel.

Adjustment mode = „Automatic“:

The adjustment is set to automatic as standard. The values for the loop and all modules are newly determined each time the loop powers up.

(2) Tolerance

Admissible deviation from the target value. A fault message is sent if the tolerance is exceeded.

- Increased: +/- 6.25%
- Standard (VdS): +/- 12.5%
- Reduced: +/- 25%
- Greatly red.: +/- 50%

(3) Actual value WB-drift

The manually read actual value is displayed as “Digits”.

(4) Actual value SC-drift

The manually read actual value is displayed as “Digits”.

(5) Target value

By clicking the “Adjust loop devices” button, the actual values are adopted as the target values for the evaluation.

(6) Allowable current for alarm LED and PI [mA]

The value for the maximum alarm current which is adopted in the control panel is defined here. This alarm current is reserved in the control panel for activation of the detector LED and parallel indicator outputs. The control panel adds the necessary current when the detector LED or parallel indicator output is triggered. If the set alarm current is reached here, then no other detector LEDs or parallel indicators are activated.

See also the "Acoustic" setting on the loop elements.

With a B5-DXI2 and a B3-DAI2, this can range between 7 mA and 70 mA. The same value as that used in the loop length calculation must be used.

Example (fictitious assumption):

Alarm current = 12 mA

Loop with x participants

Each participant requires 4 mA to activate the alarm LED.

Detectors 1 to 3 go to alarm state = $3 \times 4 \text{ mA} = 12 \text{ mA}$ --> All 3 alarm LEDs are activated.

Detector 4 also goes to alarm state, the LED is not activated as the 12 mA of the alarm current pool has already been used up.

Remark: Each element type has a different current requirement.

(7) Loop length measured [m]

This value is adopted in the "Length test" tab and is used for verifying the calculated value for the loop length.

(8) Resistance of the loop line measured [Ohm]

This value is adopted in the "Length test" tab and is used for verifying the calculated value for the loop line resistance.

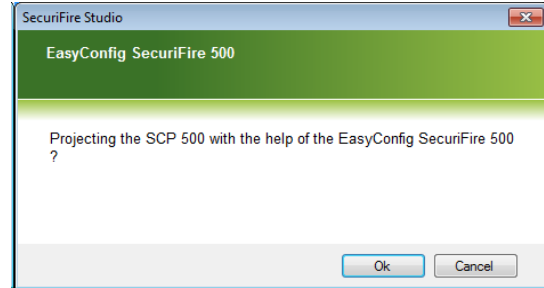
2.9 Wizards - Planning Assistants

2.9.1 EasyConfig SecuriFire 500

This Wizard is used to configure a fully functional SecuriFire 500 incl. detector loop in 10 easy steps. The Wizard features a simple user guidance sequence and is largely self-explanatory. This section simply points out any particularities of the sequence.

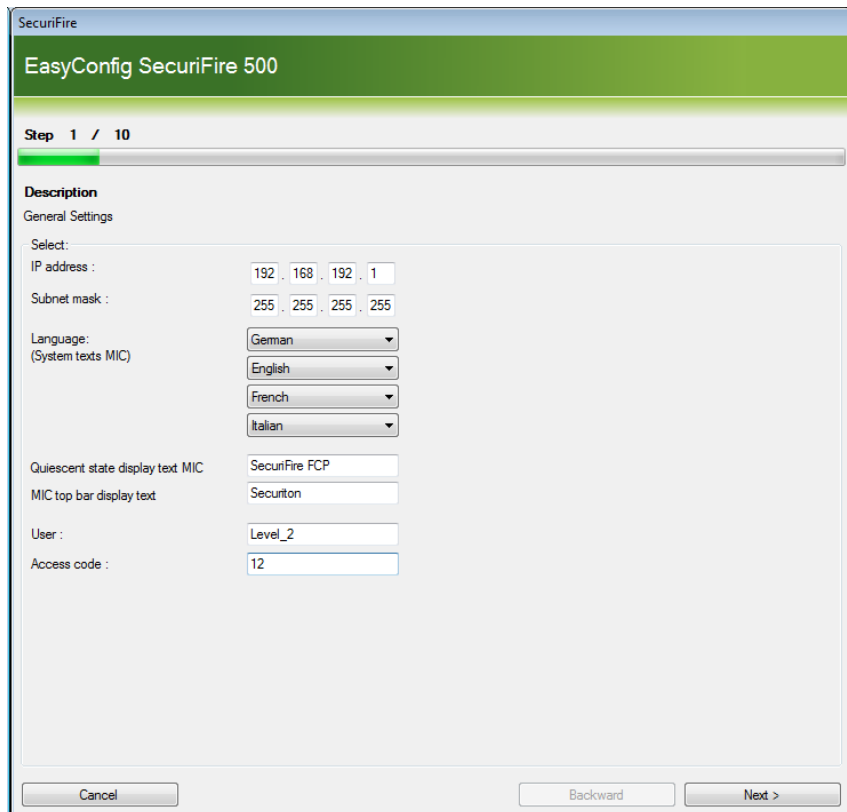
Homepage

Selecting an SF500 in the Planning/Project step displays the help page of the EasyConfig SecuriFire 500. Its use is optional. The planning can also be carried out without EasyConfig, in the same way as with the other SecuriFire control panel types.



Step 1

Planning the general parameters.



Step 2

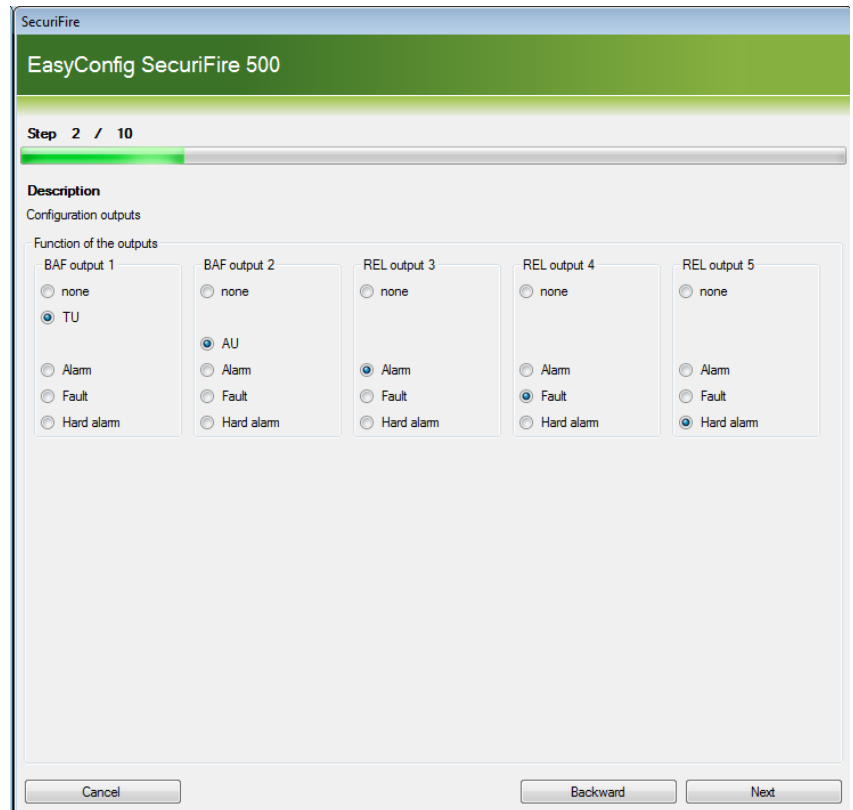
Assigning the elements

- Transmission unit
- Alarm unit

and the system states

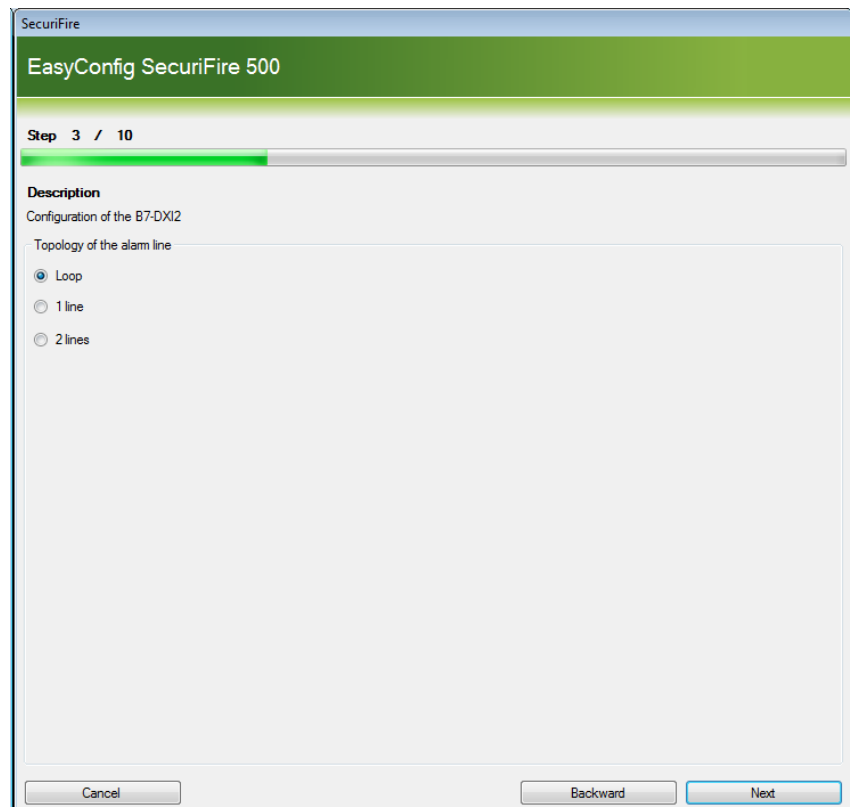
- Alarm
- Fault
- Hard alarm

to outputs 1 to 5



Step 3

Selecting the alarm line topology



Step 4

Creating logical elements on the alarm line

The screenshot shows the 'EasyConfig SecuriFire 500' window at 'Step 4 / 10'. The 'Description' section is titled 'Loop/Line' and 'Allocation of logical address ranges (e.g. from 1001-1009,1020)'. It features two columns: 'Loop' and 'Line 2'. Each column has four rows of input fields for different device types: 'DZ automatic detectors with delay', 'DZ automatic detectors', 'DZ manual call point', and 'Sirens'. The 'Loop' column has the following values: 1001-1010, 1011-1020, 1021-1030, and 1001-1010. The 'Line 2' column has empty input fields. At the bottom, there are 'Cancel', 'Backward', and 'Next' buttons.

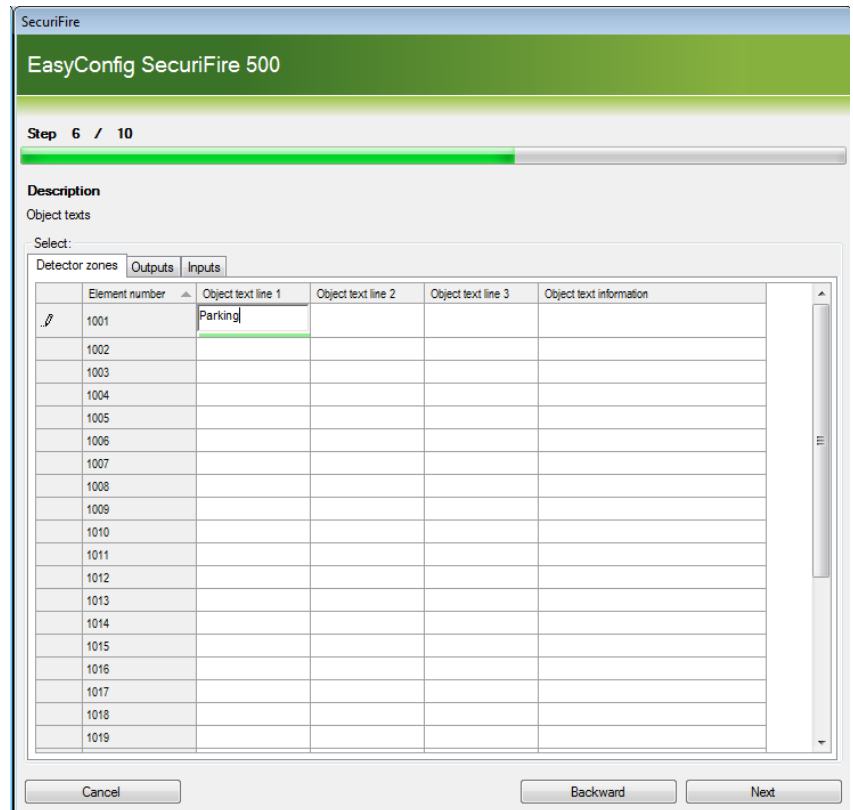
Step 5

Selecting the devices on the EPI bus

The screenshot shows the 'EasyConfig SecuriFire 500' window at 'Step 5 / 10'. The 'Description' section is titled 'Selection of EPI-devices'. It features three columns: 'Participant 1', 'Participant 2', and 'Participant 3'. Each column has a 'None' radio button selected, and a list of other device types with unselected radio buttons: B5-EPI-FPC, B5-EPI-FPD, B5-EPI-FAT, B5-EPI-FPS, B5-EPI-ASP, B5-EPI-PIM, B5-EPI-PCM, and B5-EPI-FPCZ. At the bottom, there are 'Cancel', 'Backward', and 'Next' buttons.

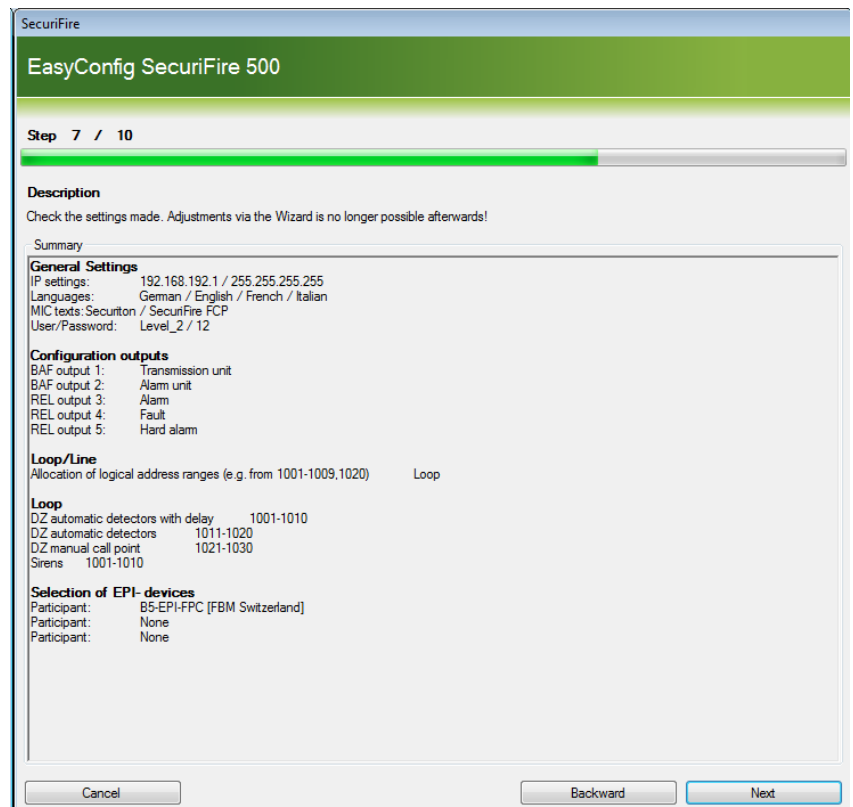
Step 6

Entering the object texts for the elements
Detection zones, Outputs and Inputs.



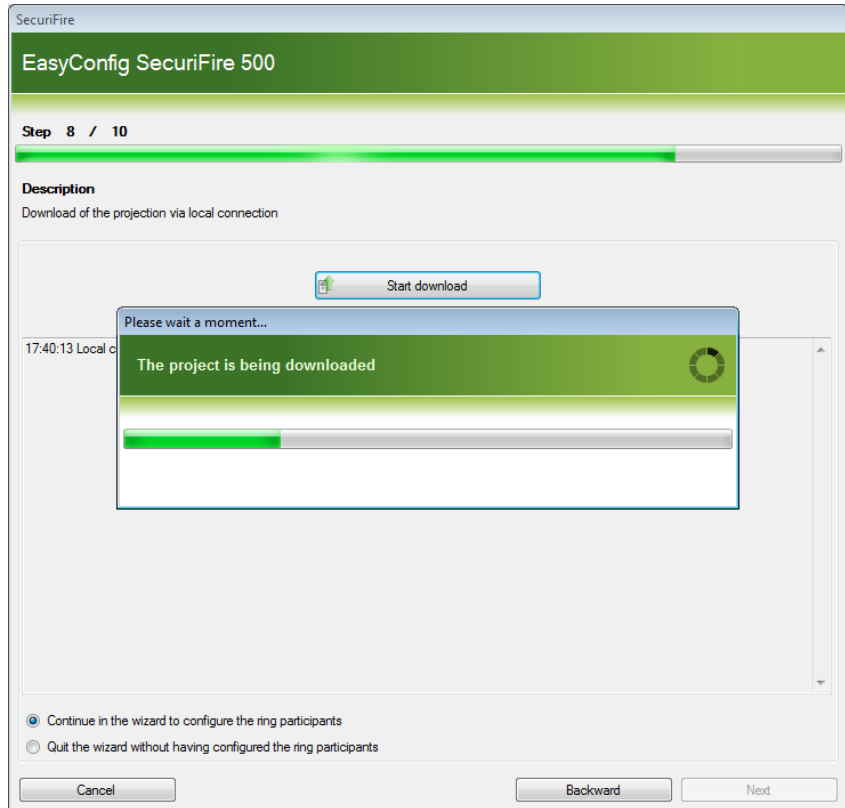
Step 7

Checking the planning data



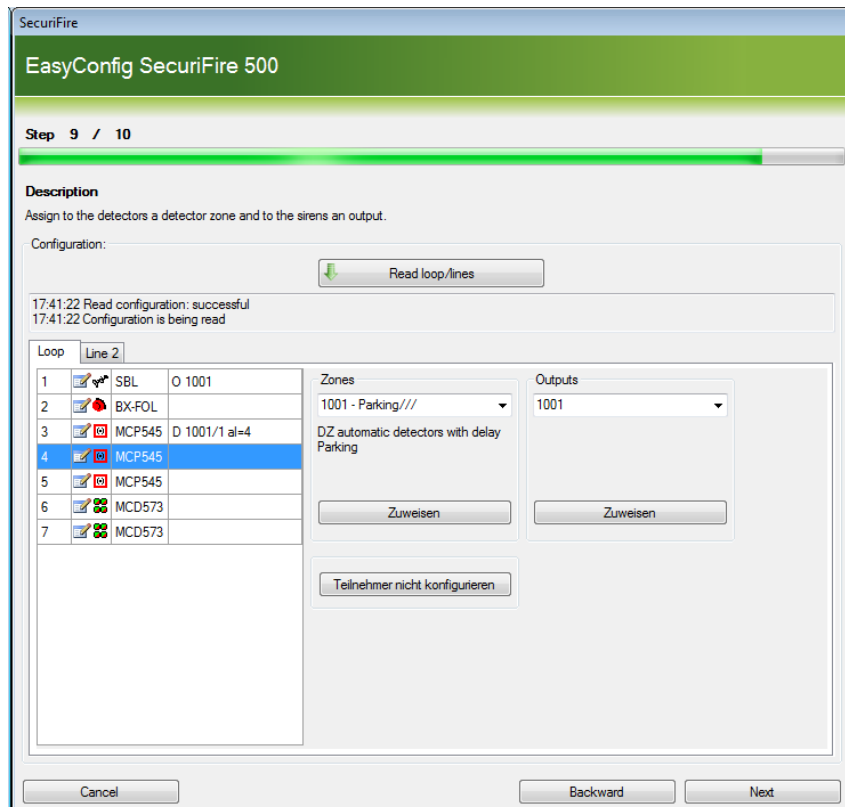
Step 8

Downloading the planning data



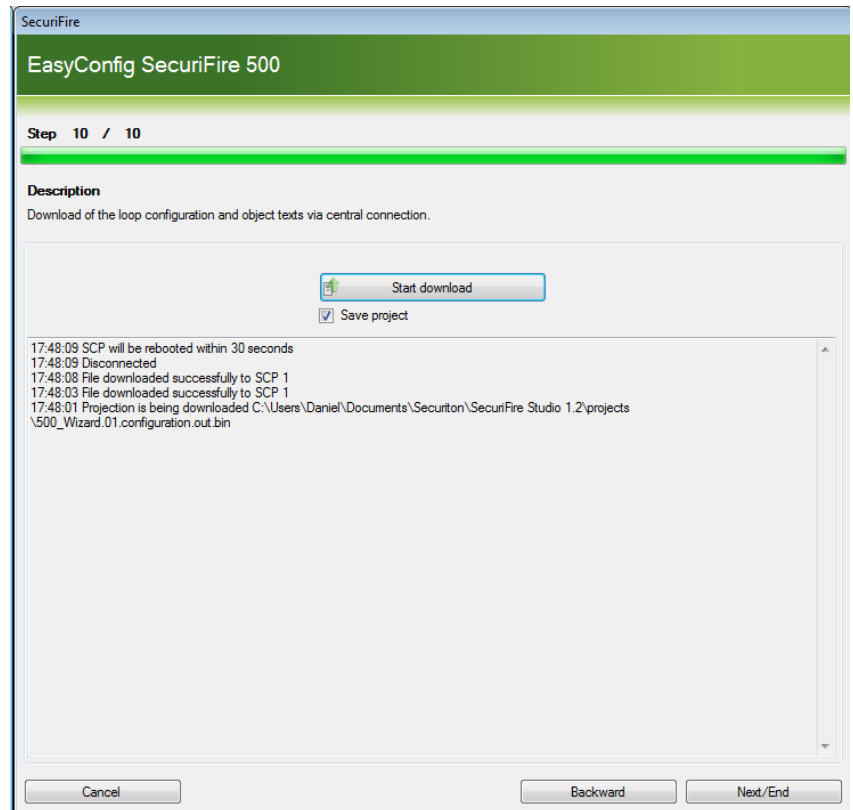
Step 9

Loop configuration



Step 10

Downloading the loop configuration and object texts



2.9.2 SCP Upgrade Wizard

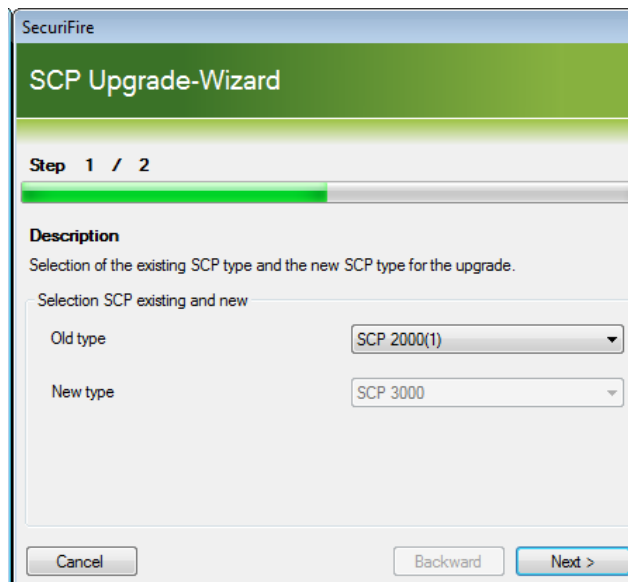
This Wizard is used to convert a previously planned SCP into a higher-order SCP type in 2 easy steps. The elements and settings already planned are not lost. The Wizard features a simple user guidance sequence and is largely self-explanatory. This section simply points out any particularities of the sequence.

Homepage

The SCP to be upgraded is highlighted in the graphical project editor. The corresponding icon is used to start the Wizard.

Step 1

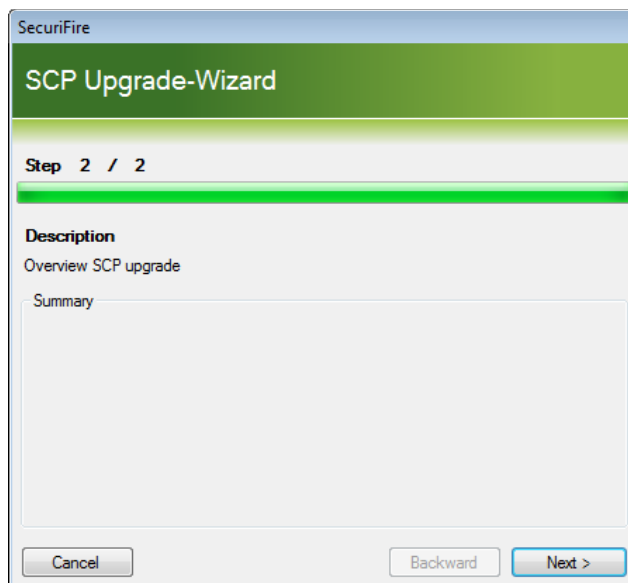
The SCP to be upgraded is displayed next to "Old type". The control panel required is selected as "New type".



The screenshot shows the 'SCP Upgrade-Wizard' window at Step 1 of 2. The progress bar is partially filled. The 'Description' section reads: 'Selection of the existing SCP type and the new SCP type for the upgrade.' Below this, there is a section titled 'Selection SCP existing and new' with two dropdown menus: 'Old type' set to 'SCP 2000(1)' and 'New type' set to 'SCP 3000'. At the bottom, there are 'Cancel', 'Backward', and 'Next >' buttons.

Step 2

Displays the action before it is executed.



The screenshot shows the 'SCP Upgrade-Wizard' window at Step 2 of 2. The progress bar is fully filled. The 'Description' section reads: 'Overview SCP upgrade'. Below this is a 'Summary' section with a large empty text area. At the bottom, there are 'Cancel', 'Backward', and 'Next >' buttons.

2.9.3 Card/unit Upgrade-Wizard

This Wizard is used to convert a previously planned card/unit into an equivalent, more modern type in two steps. The parameters and settings already planned are not lost. The Wizard features a simple user guidance sequence and is largely self-explanatory. This section simply points out any particularities of the sequence.

Homepage

The card (unit) to be upgraded is clicked on in the slot editor (unit editor).

The corresponding icon is used to start the Wizard.

Step 1

The card/unit to be upgraded is displayed next to “Old type”.

The desired type can be selected under “New type” if multiple types are available.

Step 2

Displays the action before it is executed.

2.9.4 Detector Upgrade Wizard

This Wizard is used to convert a previously planned, older generation detector to the equivalent current SecuriLine eXtended detector type using 4 easy steps.

The parameters and settings already planned are not lost.

The Wizard features a simple user guidance sequence and is largely self-explanatory.

This section simply points out any particularities of the sequence.

Possible detector type conversions:

Old detector type		New detector type
"Old type" selection	Types concerned	Permanent assignment
MCP	MCP530, MCP545	MCP545X
MCD573	MCD573	MCD573X
SSD/SCD	SSD530H, SCD573	MCD573X
STD531	STD531	MCD573X
UTD/TCD Class 1	UTD531-1, TCD531-1	MCD573X
UTD/TCD Class 2	UTD531-2, TCD531-2	MCD573X
UTD/TCD Class 3	UTD531-3, TCD531-3	MCD573X

Homepage

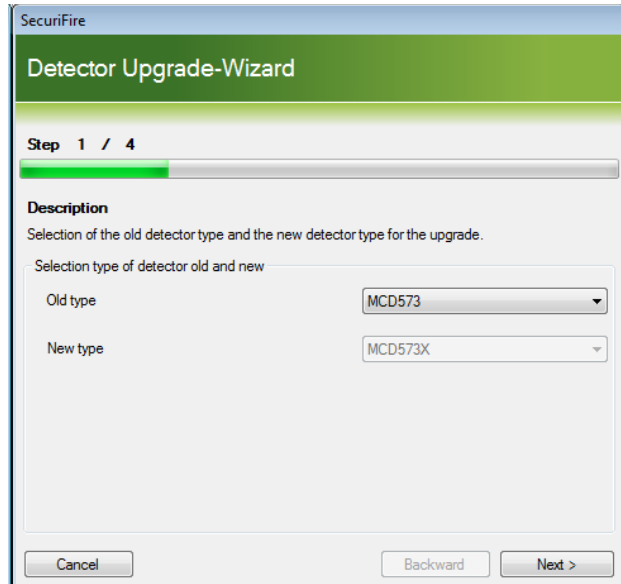
The required level "Project", "SCP" or "Loop" is highlighted in the "Loop configuration" planning stage.

The corresponding icon is used to start the Wizard.

Step 1

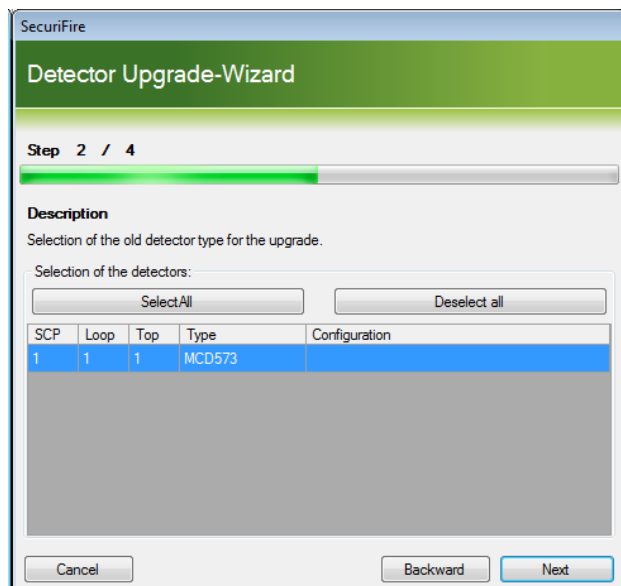
The detector type to be upgraded is selected next to "Old type".

The target detector type is displayed next to "New type".



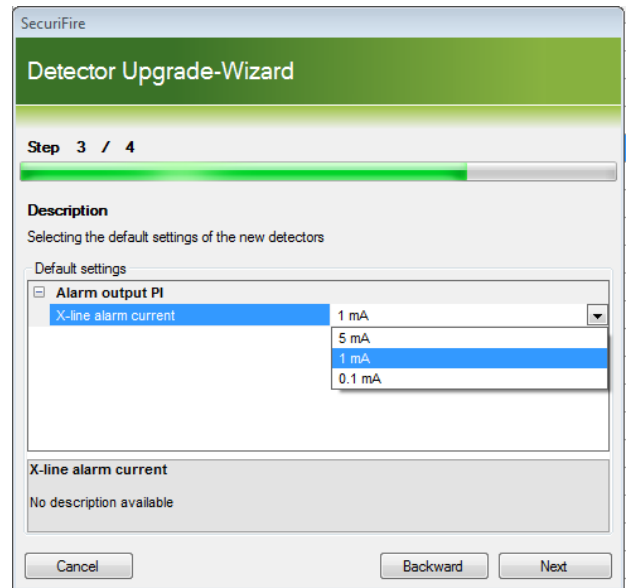
Step 2

The detectors to be upgraded are highlighted here.



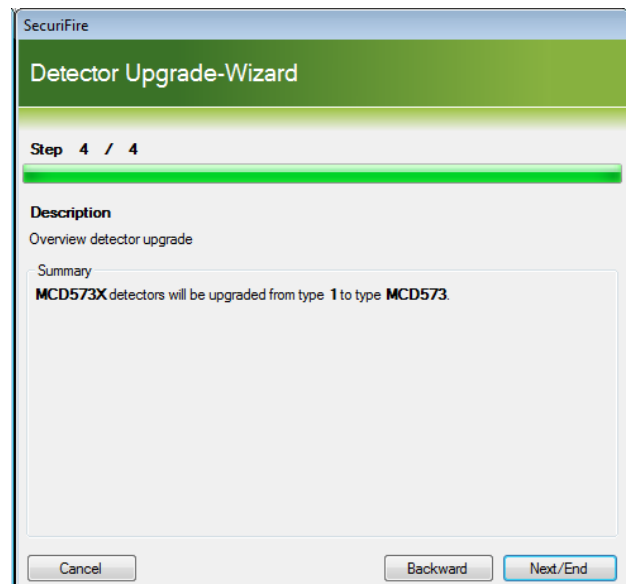
Step 3

Depending on the detector type common settings can be made here.



Step 4

Displays the action before it is executed.



3 Explanations

3.1 Explanation of “level”

3.1.1 What are levels?

The level of 1 to 4 is an additional property to the detector status "alarm" and "pre-signal". The range for the level is 1-4, wherein 4 is the highest priority.

With the state "alarm" or "pre-signal" of the detector, the projected level is transmitted in addition to the state. Through the evaluation of the levels, alarms within a zone, a control unit or a SecuriLan can be grouped and group-dependent actions can be triggered.



Notice

If the alarms or pre-signals should be given different levels, a concept must be created beforehand.

All standard functions of a fire alarm system can be projected in the system SecuriFire with the Boolean functions and collective criteria. In Boolean functions as well as in collective criteria can be projected level-dependent input conditions in order to execute level-specific functions.

For example, for automatic detectors the pre-signal can be projected as alarm with level 2. Thus, first an "Alarm Level 2" will be displayed with the trigger of a control. The regular fire incident control is then triggered with the "correct" alarm level 4.

3.1.2 Settings of the level

The level for each detector can be projected in the loop configuration. By default, all detector alarms are programmed for level 4. The level of alarm and pre-signal can be set individually.

System	Edit	Add new	Length check	Priordata	External
Detector					
Detector zone	1001				
Detector number	1				
Alarm level	Level 4				
Detection behaviour night-mode	Temperature and smoke				
Detection behaviour day-mode	Temperature and smoke				
Temperature					
Heat class	A1				
Heat class index	None				
Smoke					
Pre-signal threshold	75%				
Pre-signal status	Pre-signal				
Pre-signal level	Level 3				
Smoke sensitivity	normal				

For inputs that are configured with participant behaviour = detector, a level is also projected.

4 Version upgrade

4.1 Instructions for a version upgrade

Precondition

These are the preconditions for a successful version upgrade of a SecuriFire installation:

- The SecuriFire Studio must be installed in the corresponding target version.
- The existing project file (*.bsa) must be available, if necessary, with the valid password.

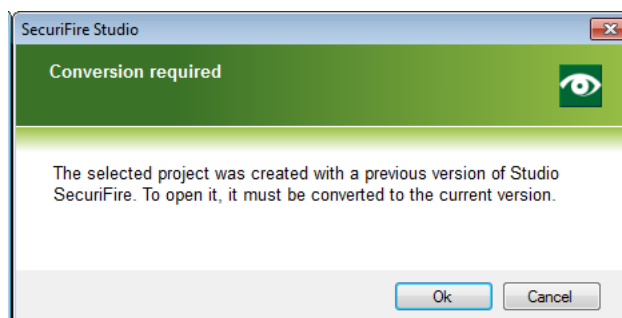
How to upgrade a SecuriFire control panel or all SecuriFire all control panels within a SecuriLan network:

Step 1 - Backup

Make a backup copy of the project file (existing version) and save it in a secure place.

Step 2 - Conversion

Open the project file (existing version) with the SecuriFire Studio (new version). Thereby, the file is automatically converted to the new version.



Step 3 - Saving

Save the project file under a new name.

From the file name must be seen, with which SecuriFire Studio version and at what day the file was saved.

Suggestion: File name = Project_Date_Studioversion.bsa (eg.:Airport_20130312_123.bsa)

Step 4 - Listing in "System information"

In the field "System information" the relevant data to the version upgrade shall be listed. (Date, modifications, responsible technician, etc.).

See chapter 2.2.1 System information.

Step 5 - Modifications

If changes need to be made to the installation, they shall be programmed at this moment.

Step 6 - Saving

Save the project file.

Step 7 – Local download of the projection

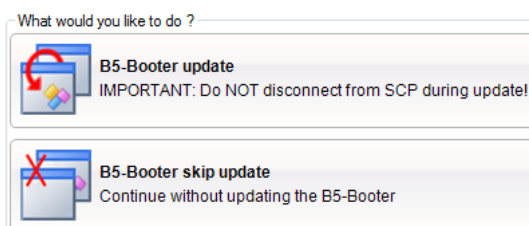
The projection is loaded via local connection into the control panel. This procedure needs to be carried out for each control panel and each remote MIC711 individually.

Depending on the state of the versions, it may be necessary to first carry out a booter update. If this is necessary, it will be indicated in the step "Projection download". In this case, the booter update has to be carried out first. Afterwards the control panel will restart and boot. Then can be made a local connection again and the projection download can be performed.

Newer B5-Booter found in library

Current version: 2.0.7

New version: 2.0.7



Step 8 – Download loop configuration

Now the fault “MODAKT XX/39” appears. The reason is that the data of the loop configuration is in the old, but the projection data is already stored in the new version in the control panel.

Therefore as a next step the loop configuration must be downloaded. The loop data can be left unchanged for the download. If modifications need to be carried out, this can now be programmed.

Step 9 – Download object texts

For completeness, the object texts shall now be downloaded.

As always, after each download the control panel must be rebooted.

Step 10 – Download Project file / Backup

Finally, the project file shall be saved on the control panel (or on various control panels).

Furthermore, the project file shall also be saved on an external storage medium (CF card, USB stick, etc.) and on the data server of the installation company.

Step 11 – Test

After each version upgrade, THE EXECUTION OF THE FOLLOWING TESTS IS MANDATORY:

- In each zone one detector must be tested. This test can also be made in maintenance mode.
- Each fire incident control output must be tested at least once with a real alarm.
- The alarm media and the alarm transmissions (inclusive alarm routing) must be tested at least once with a real alarm.

4.2 Information on handling of versions**SecuriFire installation**

New installations shall be commissioned with the latest version of the SecuriFire Studio.

In which case and at what time a version upgrade of an existing installation must be carried out can be seen in the release notes of the latest SecuriFire Studio version.

Attention: after a version upgrade, the complete installation must be tested, independently whether the projection has changed or not. See step 11.

Project file

It is recommended to include the SecuriFire Studio version into the name of the project file (eg. *_204.bsa). This shall be considered for new installations but also for modifications, extensions and version upgrades. This ensures that the project file can be opened with the correct SecuriFire Studio version. When a project file is opened and the dialog "The project must be converted" appears, be careful. The conversion shall be carried out only if a version upgrade of an installation really shall be made.

SecuriFire Studio supports structured file storage. The file is assigned the following name automatically:

Installationnumber_Storage date_StudioRelease.bsa (e.g. 123_20130915_204.bsa)

The following directory structure is automatically created at the same time:

...\Securiton\SecuriFireStudio2.0\projects\Installation name_Installation number\Exports
 ... \Securiton\SecuriFireStudio2.0\projects\Installation name_Installation number\ProjectFile
 ... \Securiton\SecuriFireStudio2.0\projects\Installation name_Installation number\Upload

SecuriFire Studio

It is recommended to have saved the setups of all SecuriFire Studios versions (of the existing installation park) on the service laptop. Example: the latest SecuriFire Studio is installed on the computer and it must be done a modification on an installation of a former version. In the case, uninstall the existing version from the computer and install the former version before making the modification. This prevents from a complete test of the installation because of an (unnecessary) version upgrade.

Notice: Parallel installation of the SecuriFire Studios is allowed, However, only versions of different SRP.

Eg: Parallel installation R 1.2.3 / R2.0.4 is allowed
 Parallel installation R 2.0.3 / R2.0.4 is not allowed