

# SIEMENS



## FT2011

### Floor repeater display

### Operation Manual

MP7/IP7

## Imprint

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# 1 About this document

## Goal and purpose

This document describes the operation of the floor repeater display FT2011 in a fire detection system. The reader shall become familiar with the possible indications and operating functions on the floor repeater display, as well as with the functionality of the floor repeater display in the overall system. This understanding makes an adequate behaviour possible in the event of fire or fault.

## Scope

This document applies to the floor repeater display type FT2011.

## Target groups

The information in this document is intended for the following target groups:

Target group	Activity	Qualification
System owner	<ul style="list-style-type: none"> <li>According to EN 50110-1, 'nominated person with the overall responsibility to ensure the safe operation of the electrical installation by setting rules and organisation or framework.'</li> </ul>	<ul style="list-style-type: none"> <li>'This person can be the owner, employer, proprietor or a delegated person.'</li> <li>'Some of these duties can be delegated to others as required. For large or complex electrical installations or networks, the duties can be delegated for parts of the installations or the network.'</li> </ul>
Commissioning personnel	<ul style="list-style-type: none"> <li>Configures the product at the place of installation according to customer-specific requirements.</li> <li>Checks the product operability and releases the product for use by the operator.</li> <li>Searches for and corrects malfunctions.</li> </ul>	<ul style="list-style-type: none"> <li>Has obtained suitable specialist training for the function and for the products.</li> <li>Has attended the training courses for commissioning personnel.</li> </ul>
Operating personnel	<ul style="list-style-type: none"> <li>Carries out procedures to correctly operate the product.</li> </ul>	<ul style="list-style-type: none"> <li>No particular basic training is needed.</li> <li>Has been instructed by the commissioning personnel.</li> </ul>
Maintenance personnel	<ul style="list-style-type: none"> <li>Carries out all maintenance work.</li> <li>Checks that the products are in perfect working order.</li> <li>Searches for and corrects malfunctions.</li> </ul>	<ul style="list-style-type: none"> <li>Has obtained suitable specialist training for the function and for the products.</li> </ul>

## Source language and reference document

- The source/original language of this document is German (de).
- The reference version of this document is the international version in English. The international version is not localized.

## Document identification

The document ID is structured as follows:

ID code	Examples
ID_ModificationIndex_Language_COUNTRY -- = multilingual or international	A6V10215123_a_de_DE A6V10215123_a_en_-- A6V10315123_a_--_--

## Date format

The date format in the document corresponds to the recommendation of international standard ISO 8601 (format YYYY-MM-DD).

## Conventions for text marking

### Markups

Special markups are shown in this document as follows:

>	Requirement for a behavior instruction
1. 2.	Behavior instruction with at least two operation sequences
–	Version, option, or detailed information for a behavior instruction
⇒	Intermediate result of a behavior instruction
⇨	End result of a behavior instruction
•	Numbered lists and behavior instructions with an operation sequence
[→ X]	Reference to a page number
'Text'	Quotation, reproduced identically
<Key>	Identification of keys
>	Relation sign and for identification between steps in a sequence, e.g., 'Menu bar' > 'Help' > 'Help topics'
↑ Text	Identification of a glossary entry

### Supplementary information and tips



The 'i' symbol identifies supplementary information and tips for an easier way of working.

## 1.1 Displays used in document

The form of display in the document sometimes uses tables.

Deviations between the original and the table representation are shown below as examples:

<pre> ABCD E FGHI ABCD: 3                 </pre>	<pre> 07:55:31                 </pre>
<pre> !ABCD: 421 ABC: 32 ABCDEF GHI AAA/BBB                 </pre>	<pre> XXX YYZ ZZZ 3                 </pre>
<pre> ABCD: 026 ABC: 75 ABCDE CCC                 </pre>	<pre> XXX YYZ ZZZ 2                 </pre>

Figure 1: Original display figure

<pre> ABCD E FGHI ABCD: 3                 </pre>	<pre> 07:55:31                 </pre>
<pre> ! ABCD: 421 ABC: 32 ABCDEF GHI AAA/BBB                 </pre>	<pre> XXX YYZ ZZZ 3                 </pre>
<pre> + ABCD: 026 ABC: 75 ABCDE CCC                 </pre>	<pre> XXX YYZ ZZZ 2                 </pre>

Table 1: Display representation in tables

The table representation has the following key deviations from the original:

- Font and representation (proportional font, not inverted)
- No frame around selection

## 1.2 Applicable documents

Sinteso document ID	Title
008838	FC20xx / FT2040 operation

Cerberus PRO document ID	Title
A6V10211076	FC7xx / FT724 operation

## 1.3 Download center

You can download various types of documents, such as data sheets, installation instructions, and license texts via the following Internet address:

<https://siemens.com/bt/download>

- Enter the document ID in the search field.



You will also find information about search variants and links to mobile applications (apps) for various systems on the home page.

## 1.4 Technical terms and abbreviations

You will find details of technical terms and abbreviations in the 'Glossary' chapter.

## 1.5 Revision history

The reference document's version applies to all languages into which the reference document is translated.



The first edition of a language version or a country variant may, for example, be version 'd' instead of 'a' if the reference document is already this version.

The table below shows this document's revision history:

Version	Edition date	Brief description
l	2018-08-29	Edition for MP7/IP7
k	2015-12-15	Edition for MP6/IP6: Referenced documents updated
j	2014-01-28	Chapter 'LEDs' revised
i	2013-11-14	Edition for MP5/IP5
h	2013-05-20	Change to date format according to ISO 8601 <b>CPR replaces CPD:</b> The Construction Products Regulation (CPR 305/2011) replaces the previous Construction Products Directive (CPD 89/106).
g	2012-09	Keyboard shortcut for opening the service menu corrected.
f	03.2012	Market package MP-EN 4.0 / Introduction Package IP4
e	05.2010	Edition MP3.0/MP3.0 XS Revision history redefined and standardized, max. number of events that can be displayed added
d	02.2009	MP2.1/MP1XS edition, glossary deleted
c	06.2008	Safety chapter revised, IC chapter deleted
b	07.2007	Restriction "Visibility not system-wide" deleted
a	11.2006	First edition



## 2 Safety


### 2.1 Safety instructions

The safety notices must be observed in order to protect people and property.

The safety notices in this document contain the following elements:







- Symbol for danger
- Signal word
- Nature and origin of the danger
- Consequences if the danger occurs
- Measures or prohibitions for danger avoidance

#### Symbol for danger

	This is the symbol for danger. It warns of <b>risks of injury</b> . Follow all measures identified by this symbol to avoid injury or death.
---	--

#### Additional danger symbols

These symbols indicate general dangers, the type of danger or possible consequences, measures and prohibitions, examples of which are shown in the following table:

	General danger		Explosive atmosphere
	Voltage/electric shock		Laser light
	Battery		Heat


#### Signal word

The signal word classifies the danger as defined in the following table:

Signal word	Danger level
<b>DANGER</b>	'DANGER' identifies a dangerous situation, which <b>will result directly in death or serious injury</b> if you do not avoid this situation.
<b>WARNING</b>	'WARNING' identifies a dangerous situation, which <b>may result in death or serious injury</b> if you do not avoid this situation.
<b>CAUTION</b>	'CAUTION' identifies a dangerous situation, which could result in <b>slight to moderately serious injury</b> if you do not avoid this situation.
<i>NOTICE</i>	'NOTICE' identifies a possibly harmful situation or possible damage to property that may result from non-observance. 'NOTICE' does not relate to possible bodily injury.


### How risk of injury is presented

Information about the risk of injury is shown as follows:

	<b>⚠ WARNING</b>
	<b>Nature and origin of the danger</b> Consequences if the danger occurs <ul style="list-style-type: none"> <li>• Measures / prohibitions for danger avoidance</li> </ul>

### How possible damage to property is presented

Information about possible damage to property is shown as follows:


	<b>NOTICE</b>
	<b>Nature and origin of the danger</b> Consequences if the danger occurs <ul style="list-style-type: none"> <li>• Measures / prohibitions for danger avoidance</li> </ul>

## 2.2 Safety regulations for the method of operation



### National standards, regulations and legislation

Siemens products are developed and produced in compliance with the relevant European and international safety standards. Should additional national or local safety standards or legislation concerning the planning, mounting, installation, operation or disposal of the product apply at the place of operation, then these must also be taken into account together with the safety regulations in the product documentation.

### Electrical installations

	<b>⚠ WARNING</b>
	<b>Electrical voltage</b> Electric shock <ul style="list-style-type: none"> <li>• Work on electrical installations may only be carried out by qualified electricians or by instructed persons working under the guidance and supervision of a qualified electrician, in accordance with the electrotechnical regulations.</li> </ul>

- Wherever possible disconnect products from the power supply when carrying out commissioning, maintenance or repair work on them.
- Lock volt-free areas to prevent them being switched back on again by mistake.
- Label the connection terminals with external voltage using a 'DANGER External voltage' sign.
- Route mains connections to products separately and fuse them with their own, clearly marked fuse.
- Fit an easily accessible disconnecting device in accordance with IEC 60950-1 outside the installation.
- Produce earthing as stated in local safety regulations.

	<b>⚠ CAUTION</b>
	<p><b>Noncompliance with the following safety regulations</b></p> <p>Risk of injury to persons and damage to property</p> <ul style="list-style-type: none"> <li>• Compliance with the following regulations is required.</li> </ul>
	<ul style="list-style-type: none"> <li>• Specialist electrical engineering knowledge is required for installation.</li> <li>• Only an expert is permitted to carry out installation work.</li> </ul> <p>Incorrect installation can take safety devices out of operation unbeknown to a layperson.</p>

### Mounting, installation, commissioning and maintenance

- If you require tools such as a ladder, these must be safe and must be intended for the work in hand.
- When starting the fire control panel ensure that unstable conditions cannot arise.
- Ensure that all points listed in the 'Testing the product operability' section below are observed.
- You may only set controls to normal function when the product operability has been completely tested and the system has been handed over to the customer.

### Testing the product operability

- Prevent the remote transmission from triggering erroneously.
- If testing building installations or activating devices from third-party companies, you must collaborate with the people appointed.
- The activation of fire control installations for test purposes must not cause injury to anyone or damage to the building installations. The following instructions must be observed:
  - Use the correct potential for activation; this is generally the potential of the building installation.
  - Only check controls up to the interface (relay with blocking option).
  - Make sure that only the controls to be tested are activated.
- Inform people before testing the alarm devices and allow for possible panic responses.
- Inform people about any noise or mist which may be produced.
- Before testing the remote transmission, inform the corresponding alarm and fault signal receiving stations.

### Modifications to the system design and the products

Modifications to the system and to individual products may lead to faults, malfunctioning and safety risks. Written confirmation must be obtained from Siemens and the corresponding safety bodies for modifications or additions.

### Modules and spare parts

- Components and spare parts must comply with the technical specifications defined by Siemens. Only use products specified or recommended by Siemens.
- Only use fuses with the specified fuse characteristics.
- Wrong battery types and improper battery changing lead to a risk of explosion. Only use the same battery type or an equivalent battery type recommended by Siemens.
- Batteries must be disposed of in an environmentally friendly manner. Observe national guidelines and regulations.

### Disregard of the safety regulations

Before they are delivered, Siemens products are tested to ensure they function correctly when used properly. Siemens disclaims all liability for damage or injuries caused by the incorrect application of the instructions or the disregard of danger warnings contained in the documentation. This applies in particular to the following damage:

- Personal injuries or damage to property caused by improper use and incorrect application
- Personal injuries or damage to property caused by disregarding safety instructions in the documentation or on the product
- Personal injury or damage to property caused by poor maintenance or lack of maintenance

## 2.3 Standards and directives complied with


A list of the standards and directives complied with is available from your Siemens contact.


### 2.3.1 Current Firmware Version Status

<b>!</b>	<p><b>NOTICE</b></p> <p><b>Not the current firmware version status of a newly installed fire detection installation</b></p> <p>Possible limitations for the configuration or use of devices.</p> <ul style="list-style-type: none"> <li>• Compare the firmware version of a newly installed fire detection installation with the currently approved firmware version status.</li> <li>• Use the currently approved firmware version status.</li> <li>• Update the firmware if required, in accordance with the chapter 'FW update for main CPU and additional CPUs' in document 009052; see chapter 'Applicable documents'.</li> </ul>
----------	--

## 2.4 Release Notes

Limitations to the configuration or use of devices in a fire detection installation with a particular firmware version are possible.

	<p><b>⚠ WARNING</b></p>
	<p><b>Limited or non-existent fire detection</b>                      Personal injury and damage to property in the event of a fire.</p> <ul style="list-style-type: none"> <li>• Read the 'Release Notes' before you plan and/or configure a fire detection installation.</li> <li>• Read the 'Release Notes' before you carry out a firmware update to a fire detection installation.</li> </ul>

	<p><b>NOTICE</b></p>
	<p><b>Incorrect planning and/or configuration</b>                      Important standards and specifications are not satisfied.                      Fire detection installation is not accepted for commissioning.                      Additional expense resulting from necessary new planning and/or configuration.</p> <ul style="list-style-type: none"> <li>• Read the 'Release Notes' before you plan and/or configure a fire detection installation.</li> <li>• Read the 'Release Notes' before you carry out a firmware update to a fire detection installation.</li> </ul>

## 3 Features

The ↑ floor repeater display is an indication and operating unit in a fire detection installation with the following functions:

### Indication of events

- 'ALARM'
  - 'Pre-ALARM'
- 'Fault'
- 'Isolation'
- ↑ 'Technical message'

### Operation

- Scrolling through lists
- 'Silence buzzer'

The ↑ floor repeater display is synchronized with 'Stations' of the configured ↑ visibility and shows the same event texts.



The possible number of displayed events is limited. You will find details in the corresponding section.

---

### 3.1 Maximum number of events that can be displayed

The maximum number of events that can be displayed is limited and depends on the length of the event texts. Assuming that the event texts are long, the following maximum numbers of events apply to the corresponding displays:

- Extended view: 18
- Standard view: 37
- Details view: 20



Events are displayed in order of priority. If the maximum number of events that can be displayed is reached, events with higher priority replace those with lower priority in the display.

Events which are no longer displayed due to the limitation can be listed completely on the control panel.

---

#### See also

- 📄 [Indicating and scrolling in lists \[→ 20\]](#)

## 4 PMI

The figure below shows the PMI of a ↑ floor repeater display.

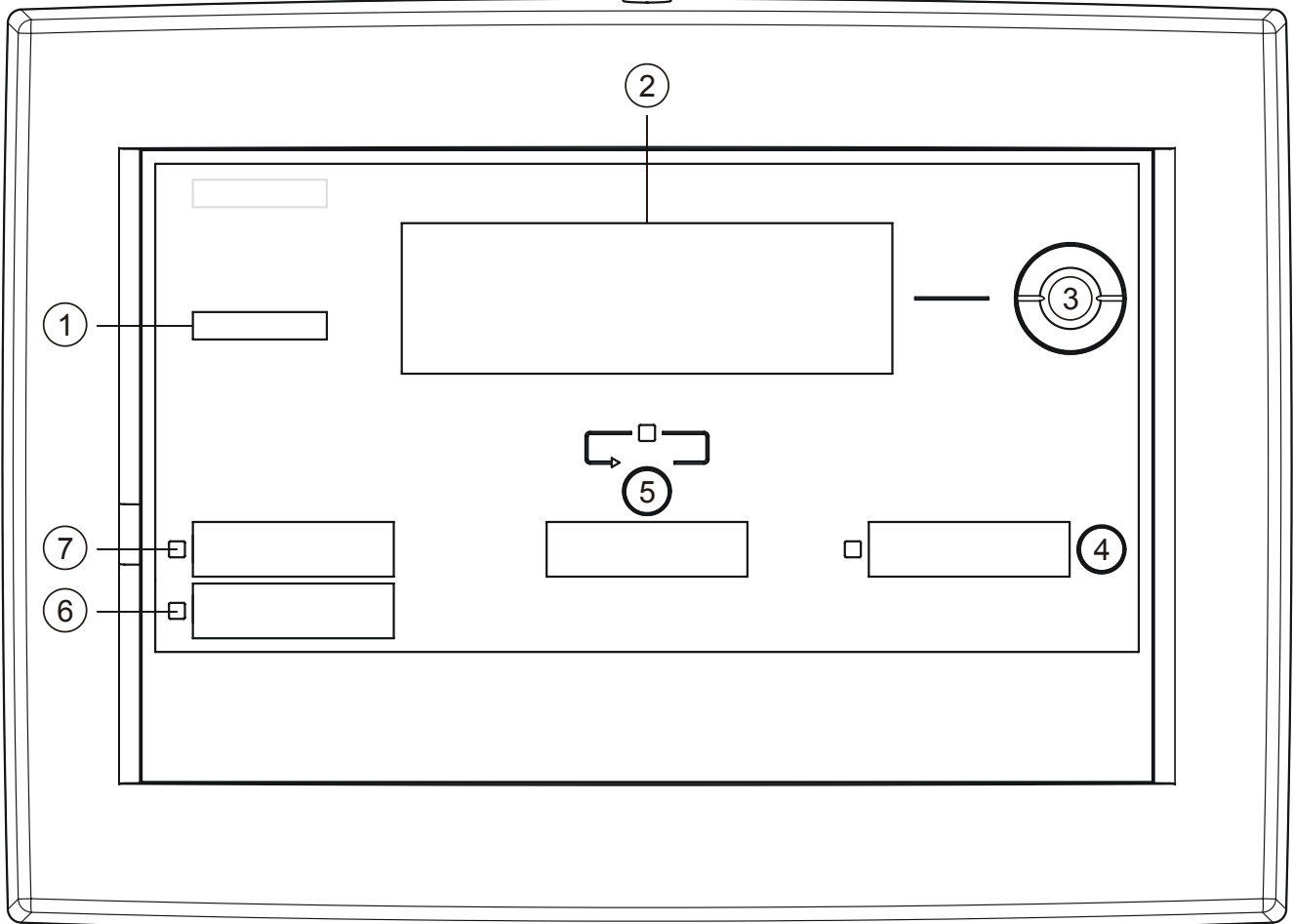


Figure 2: PMI, floor repeater display

- |   |                         |   |                      |
|---|-------------------------|---|----------------------|
| 1 | 'ALARM' LEDs            | 5 | 'More alarms' button |
| 2 | Display                 | 6 | LED, configurable    |
| 3 | Navigation buttons      | 7 | LED 'System On'      |
| 4 | 'Silence buzzer' button |   |                      |

## 4.1 Buttons on the PMI

### Navigation buttons

The navigation buttons work in the same way as the arrow keys on a PC keyboard. With the buttons <▲> and <▼> it is possible to scroll to the next entry in a list.

### <Silence buzzer>

Switches the buzzer off.

### <More alarms>

By pressing the <More alarms> button, the display changes to the next alarm event. In case of alarm, this button has the same function as the navigation button <▼>.

## 4.2 Display

The display has two areas:

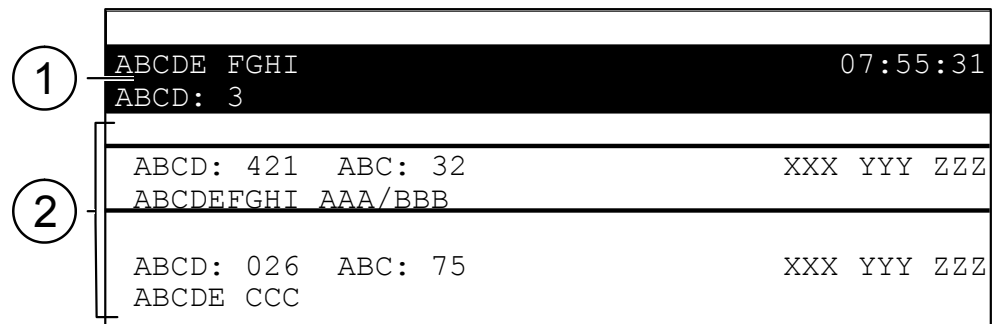


Figure 3: Display representation with two indicated messages

1 Header

2 Representation area

## 4.3 LEDs

The LEDs on the ↑Person Machine Interface signal 'Events' and conditions. In addition, the LEDs support the operator's orientation. The LEDs can light up in red, yellow, or green. The LEDs can be configured according to customer-specific requirements.

The LED colors can, for example, signal the following information:

- |        |   |
|--------|---|
| Red    | <ul style="list-style-type: none"> <li>• ALARM</li> <li>• Activations, e.g., ↑ remote transmission, ↑ alarm devices, control function</li> </ul>                  |
| Yellow | <ul style="list-style-type: none"> <li>• Fault</li> <li>• Isolation</li> <li>• Deactivation, e.g. remote transmission, alarm devices, control function</li> </ul> |
| Green  | <ul style="list-style-type: none"> <li>• System is in operation</li> </ul>  |

Additional information on the conditions of the LEDs (steady on, steady off or flashing) can be found in the relevant chapter.




## 5 Service menu

Various settings can be performed using a service menu. You can open the service menu using a keyboard shortcut (see corresponding chapter).

After calling up the menu and entering a password, the following menu items are available:

- 'Device information'
  - Shows detailed information on the device.
- 'Buzzer on/off'
  - Settings of the buzzer.
- 'LED test'
  - Function test of the LED.
- 'Key test'
  - Function test for the buttons of the PMI.
- 'LCD test'
  - Function test of the display.
- 'LCD contrast'
  - Setting of the display contrast in percent.
- 'exit'
  - Closes the service menu.

### See also

 Open service menu / Select menu item [→ 21]

## 6 Operation

### 6.1 ALARM Procedure

If your fire detection system has no delayed alarm transmission function ('AVC'), the variant –'Fire Brigade in' 'mm:ss' in Step 1 (see Procedure in the event of alarm) does not apply.

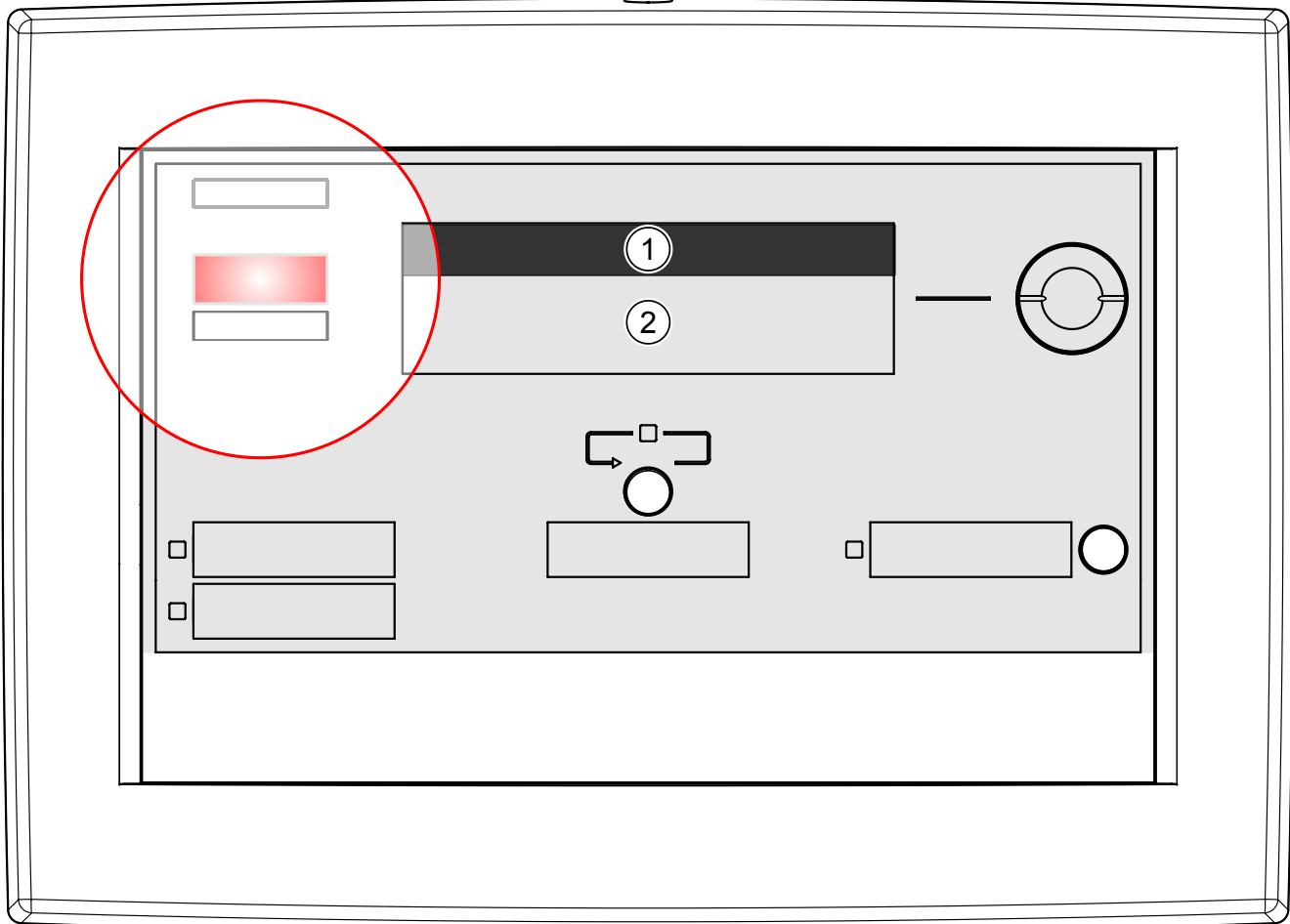


Figure 4: ALARM operation sequence

1 Read the top line

2 Read off the fire location

### Procedure in the event of alarm

Step	Action / Condition	Consequence / Status
1	Read <b>top line</b> on display	
	– 'Fire Brigade requested'	'ALARM' is transmitted to the fire brigade
	– 'Fire Brigade in' 'mm:ss'	'ALARM' is transmitted to fire brigade in 'mm:ss' Remaining time is shown as <b>Countdown</b>
	– 'Call Fire Brigade !' If: Remote transmission switched off Remote transmission blocked or defective No remote transmission available	<b>Fire brigade must be called by phone!</b> No automatic transmission to fire brigade
2	Read off <b>fire location</b> on display	
3	<b>Go to the fire location</b>	
4	<b>Decide:</b> MAJOR INCIDENT or ↑ minor incident	

Condition	MAJOR INCIDENT	↑ Minor incident
Fire brigade has been called	<b>Save people</b> <b>Guide the fire brigade to the fire location</b> <b>Fight the fire</b>	Try to prevent fire brigade deployment
'Fire Brigade in' 'mm:ss' <b>Countdown is running</b>	Trigger 'Manual call point' immediately	Try to prevent fire brigade deployment
'Call Fire Brigade !' No automatic transmission to the fire brigade	<b>Call the fire brigade on the phone!</b>	

## 6.2 Procedure in case of Fault

Step	Action
1	Press <Buzzer on/off> on the ↑ Person Machine Interface
2	Read off <b>fault location</b> on display
3	<b>Go to the fault location</b>
4	<b>Eliminate the cause of the fault</b>



A list of possible 'Faults' and how they are eliminated can be found in the chapter 'Faults / Troubleshooting'

If you cannot eliminate a 'Fault', please contact your service provider.

### 'Fault' and 'Intervention Concept' ('IC')

On consideration of 'Intervention Concept', events of the 'Fault' category can be assigned their own sequence. This sequence may be configured differently and depends on the 'Manned operation' / 'Unmanned operation' operation mode.

An exemplary sequence after a 'Fault', on consideration of the 'Intervention Concept', is graphically represented in the following:

#### 'Fault' has occurred

- 'Unmanned operation' operation mode
    - Remote transmission for 'Faults' is activated
  - 'Manned operation' operation mode
    - The remote transmission for 'Faults' is activated unless the 'Fault' is acknowledged within the delay t1.
1. Read the location of 'Fault' on the display.
  2. Go to the location of 'Fault'.
  3. Rectify 'Fault'.

#### See also

Faults / Troubleshooting [→ 28]

## 6.3 Indicating and scrolling in lists

'Events' and conditions, starting from the ↑ floor repeater display's ↑ visibility, are indicated in lists.



Generally the list with the 'Events' of the highest priority is automatically displayed on the floor repeater display.

For example the alarm list is automatically displayed when 'Isolations', 'Faults' and an 'ALARM' have occurred.

If a list contains several 'Events', you may scroll to the next list item by means of the navigation buttons. The next 'Event' is highlighted.



When the 'ALARM' event list is open, the <More alarms> button assumes the function of the button <▼>, changing to the next alarm event upon activation.

#### See also

Maximum number of events that can be displayed [→ 14]

## 6.4 Open service menu / Select menu item

To open the service menu a keyboard shortcut as well as a password are required.



---

The service menu can only be opened when no 'Event' is displayed.

---

### Opening the service menu

- ▷ No 'Event' are displayed.
- 1. Press <More Alarms>, with <Reset> button pressed.
  - ⇒ The password dialog is shown.
- 2. Enter the password and confirm.
  - ⇒ The service menu is open.

### Select menu item

- In the service menu the highlighted menu item can be executed by pressing the <More Alarms> button or by opening the sub-menu.
- The buttons <▲> and <▼> highlight the next menu item.

### See also

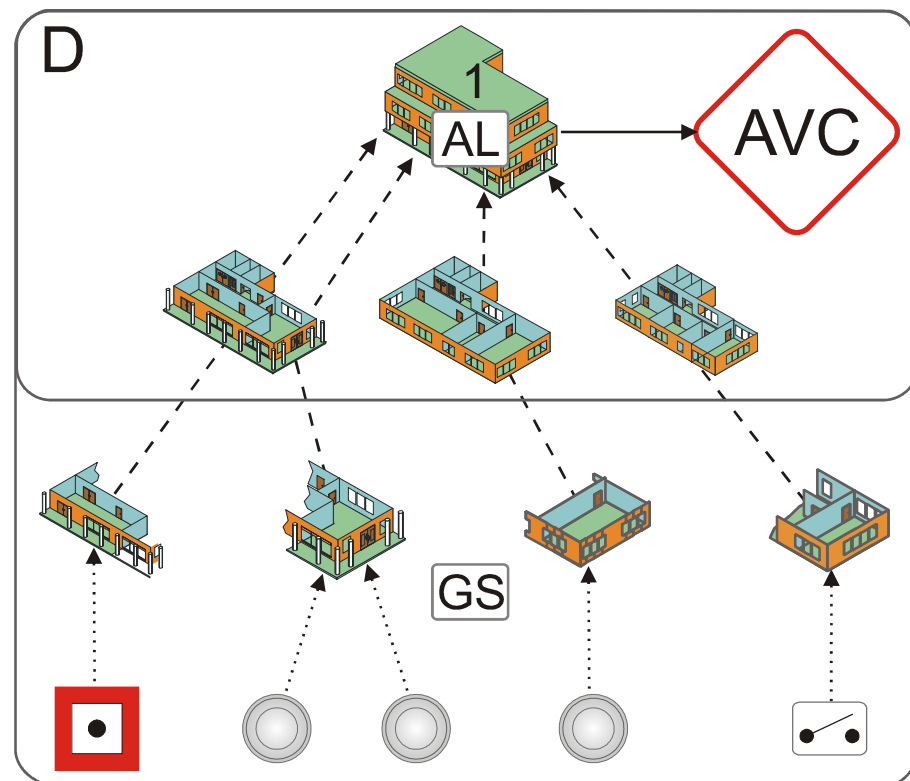
Service menu [→ 17]

## 7 Alarm verification concept (AVC)

The 'Alarm Verification Concept' serves the purpose of delayed alarm transmission and takes into account the interaction of the operating personnel in the alarming sequence.

Operating personnel are able to examine the indicated fire location in the event of a fire alarm. In the event of a false alarm or minor incident, the intervention of the fire brigade can be avoided.

### Information flow of 'ALARM' and 'Pre-ALARM'



D ↑ 'Detection tree'

AVC Alarm verification concept

1 ↑ 'Area'

AL ↑ 'Pre-ALARM' / 'ALARM'

GS ↑ Danger levels

The 'Area' receives 'Pre-ALARMS' or 'ALARMS' from 'Zones'. Alarm verification takes place at 'Area' level.

Configuration for 'Pre-ALARMS' and 'ALARMS' is not related within 'AVC'. The type of verification and alarming can be separately configured for the 'Manned operation' and 'Unmanned operation' operation modes.

'ALARMS' of 'Manual zones' and 'Automatic zones' 'Zones' as well as 'Degraded FIRE ALARM' can be configured differently.



A maximum of one 'AVC' is possible per 'Area'.

## 7.1 Attendance check

Should an event ('Pre-ALARM', 'ALARM') arise, the operating personnel may acknowledge presence within the time  $t_1$ . After acknowledgement, the investigation time  $t_2$  starts. If presence is not acknowledged within the given time  $t_1$ ,  $\uparrow$  global alarming is activated.

## 7.2 Investigation time

During the investigation time  $t_2$  the operating personnel may examine the indicated source of alarm and check the cause of the 'ALARM':

- Is it a real fire = Major incident?
- Is it a smoldering waste-paper basket = Minor incident?
- Has the  $\uparrow$  installation detected a deceptive phenomenon = False alarm?

In the event of a major incident (emergency), the nearest 'Manual call points' or <Alarm delay off> must be pressed. "Immediate global alarming" is then triggered.

In the case of a  $\uparrow$  minor incident or  $\uparrow$  false alarm the operator may reset the 'ALARM' and cancel alarming.



---

If the 'ALARM' is not reset within the given time  $t_2$ , 'Immediate global alarming' is activated.

---

## 7.3 Example of a verification process

Alarm verification proceeds as follows:

- An alarm event activates ↑ local alarming and starts the time t1 for attendance check.
- Operating personnel acknowledge 'ALARM' on the operating terminal prior to the expiry of t1. Acknowledging normally silences local alarming (configurable feature).

If there is no acknowledgment, ↑ global alarming is activated after the expiry of t1.

- After acknowledgement, the investigation time t2 starts. During time t2 operating personnel investigate the fire location.
  - In the case of a minor incident the operator resets the 'ALARM' at the nearest operating terminal. The alarming process stops, and no global alarming is activated.
  - In the event of a fire, the nearest 'Manual call points' or <Alarm delay off> must be pressed. 'Immediate global alarming' is triggered.

If there is no reset, 'Immediate global alarming' is also activated after the expiry of t2.



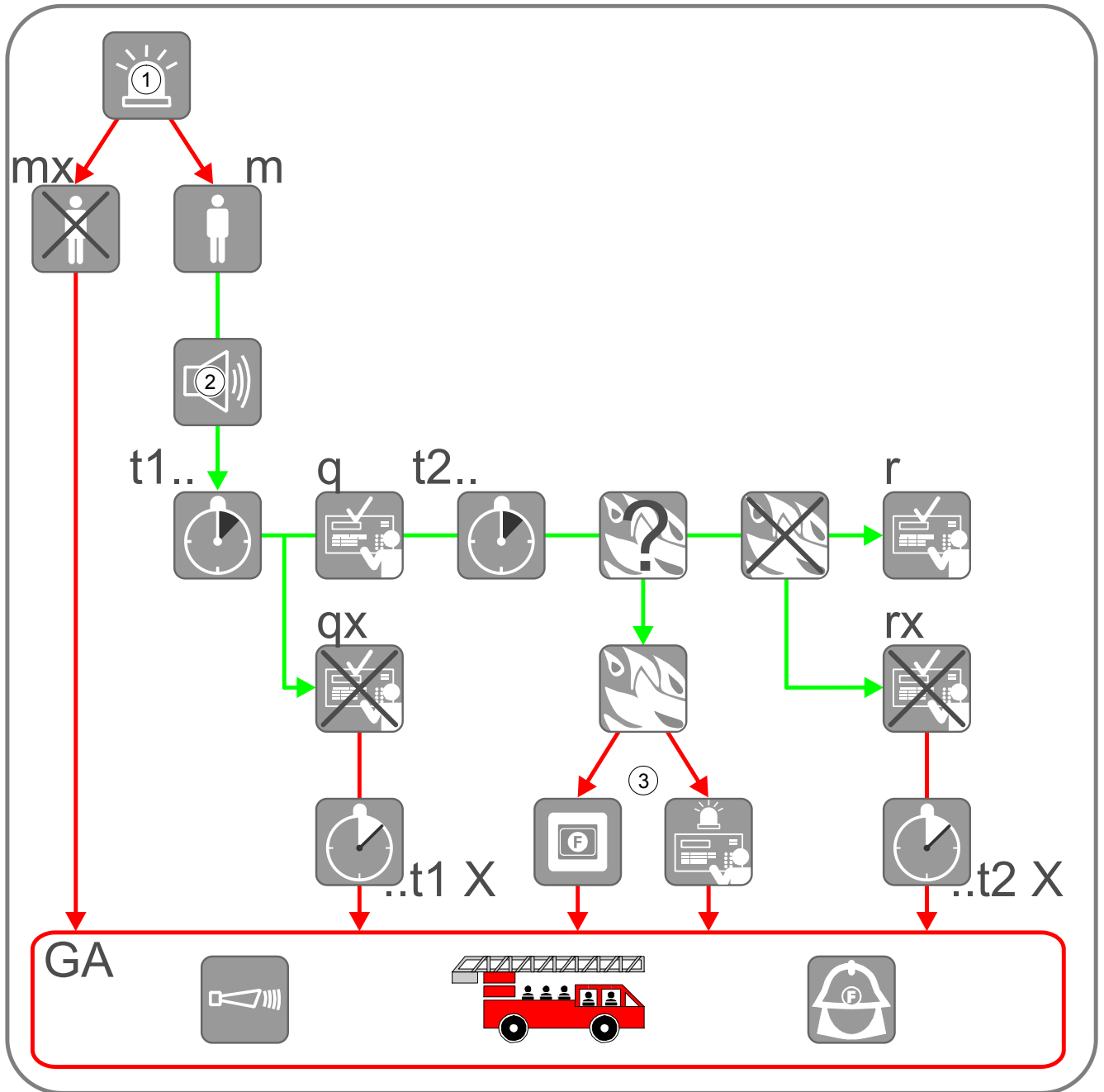


Figure 5: Alarm verification

1	Alarm event	q	Acknowledge at 'Station'
2	Local alarming	qx	Not acknowledged
3	Manual call point or <Alarm delay off> on 'Station'	t2..	Time t2 to investigate the source of alarm / the fire location
mx	'Unmanned operation' operation mode	..t2 X	Time t2 has expired
m	'Manned operation' operation mode	r	Reset on 'Station'
t1..	Time t1 for attendance check	rx	Not reset
..t1 X	Time t1 has expired	GA	Global alarming

## 7.4 Fire alarming

Alarming is controlled at ↑ 'Area' level. During alarming the ↑ alarming equipment is activated, e.g., ↑ alarm devices and remote transmission devices.

### Alarm devices

For ↑ local and ↑ global alarming, acoustic alarm devices, beacons, digital outputs, etc., can be used. The tone of the alarm devices can be configured differently for local and global alarming (the alarm devices must be suitable for this).

### Remote transmission

The alarm message is transmitted to an intervention station. In the case of local alarming, this is usually the company fire brigade and for global alarm usually the state fire brigade. A remote transmission device must be used to transmit alarm messages via the public telephone network.

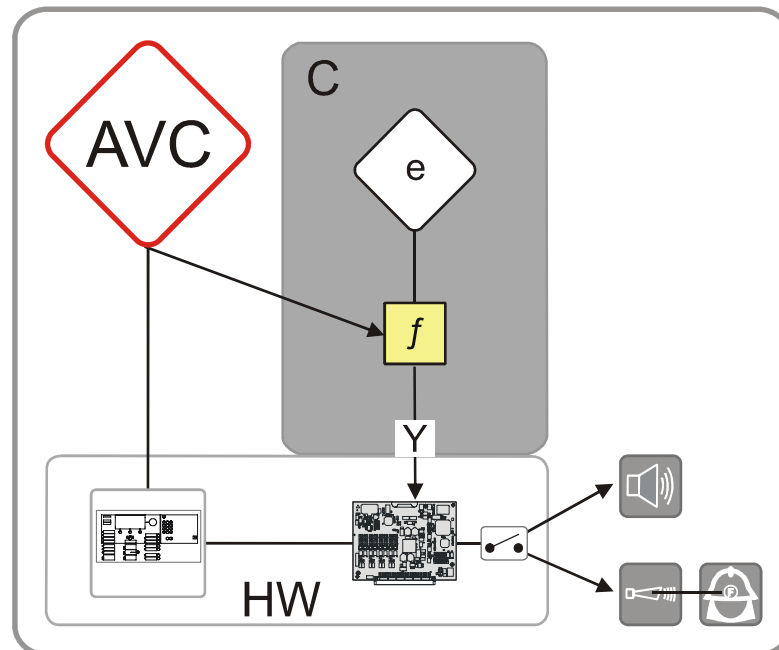


Figure 6: Information flow during alarming

AVC	'Alarm Verification Concept'	f	↑ Alarming control
C	↑ 'Control tree'	Y	Local and global alarming
e	'Alarming control group'		

The alarm devices and the remote transmission can be separately configured for:

- Alarm type (only with automatic zones)
  - 'Pre-ALARM'
  - 'ALARM'
- Zone type (only with 'ALARMS')
  - Manual alarm
  - Automatic alarm
  - Degraded fire alarm
- Operation mode:
  - 'Manned operation'
  - 'Unmanned operation'
- Alarming type:
  - 'Local alarming only'
  - 'Delayed alarming'
  - 'Global alarming only'

## 8 Faults / Troubleshooting

If the ↑ 'Site' displays a 'Fault', the table below provides a list of all possible 'Faults', including information on the possible causes.

If a 'Fault' cannot be eliminated with the help of these operation instructions, please contact the service engineer.

'Fault'	Cause	Remedy
'Automatic detector'	'Detector' missing	Re-insert 'Detector'
	'Detector' defective	Replace 'Detector' with replacement detector. <b>⚠ CAUTION! Any defective 'Detector' must always be replaced by a 'Detector' of the same type.</b>
'Manual call point'	Glass pane broken	Replace glass pane
	Other damages	Contact service provider
'Mains failure'	'Mains failure' in the public network	No action required. Emergency power supply is ensured by batteries during at minimum 12 hours; depending on the customer specification up to 72 hours.
	Fuse damaged	Check fuses (current distributor of the building) and replace them if necessary.



With all other 'Faults', the service provider in account must be contacted.

## 9 Maintenance

Please adhere to the local provisions.

No maintenance work is required.

### Cleaning the PMI

To clean the PMI use a wet cloth without any cleaning agents, abrasives or solvents.

# Glossary

## Alarm device

Element in the fire detection system for acoustic and/or visual alarming, e.g. alarm sounder, beacon.

## Alarming control

Monitoring and controlling the alarming equipment

## Alarming equipment

Alarm devices and remote transmissions

## Area

The top level in the detection tree. Sections and zones are assigned to the area.

## Control tree

Structure tree with control group and control.

## Danger level

A fire detector signal which conveys the possibility of fire. Automatic fire detectors, for example, have danger levels 0 to 3. Manual call points only have danger levels 0 and 3. 0 = no danger, 1 = possible danger, 2 = probable danger, 3 = highly probable danger.

## Detection tree

Diagram of the geographical and organizational arrangements of sensors in a building. This is a hierarchical structure comprising the area, section, and zone.

## False alarm

Alarm not triggered by a danger.

## Floor repeater display

A display device without operating elements.

## Global alarming

Global alarming equipment (e.g., remote transmission) is actuated and external intervention forces (e.g., the fire brigade) are alerted.

## Local alarming

Local alarming equipment (e.g. acoustic or optical) is actuated in order to call up intervention personnel and to alert people of a possible fire hazard.

## Minor incident

Alarm situation which the operating personnel can handle themselves and does not, therefore, trigger global alarming.

## PMI

The arrangement of operating and display elements on a fire control panel or on a fire terminal. Includes the LEDs, buttons, the display, and the operation options such as the key switch, fire brigade control and display (FBA), and the EVAC NL Person Machine Interface.



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**Pre-alarm**

Stage before an alarm for information early on, should an event occur.

**Remote transmission**

Remote transmission.

**Site**

Depiction of fire detection installation: The top level in the figure showing the installed system. Combines hardware tree, detection tree, and control tree.

**Technical message**

Events (e.g., from third-party systems) evaluated via sensors or contacts which are forwarded to the fire control panel.

**Visibility**

Defines which part of a site is visible and can be operated on a station.

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