SIEMENS

Synova® FC330A
Fire detection system

Operating manual
System operation for user

Phase 4

Fire & Security Products
Siemens Building Technologies Group

Introduction

About this operation manual

How to use this operation manual

This operation manual describes the use and the operation of the control console FC330A. It contains all information for the normal user with access level 2 who has to react to alarms, disable and enable parts of the system, etc.

This document contains the following:

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Fundamentals	Fundamental information on the console: – Description of the control console, functions of the keys – Description of the floor panels, functions of the keys – Overview of the menu structure – Fundamental operation of the console – What is normal operation – How to get access for operation – Manned and unmanned operation	**3**
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How to read this operation manual

This operation manual uses several symbols to guide the user through the manual.

The meanings in detail are:

1. Multi step actions are marked with numbers.

▶ Single step actions are marked with a triangle.

➜ The result of an action is marked with an arrow.

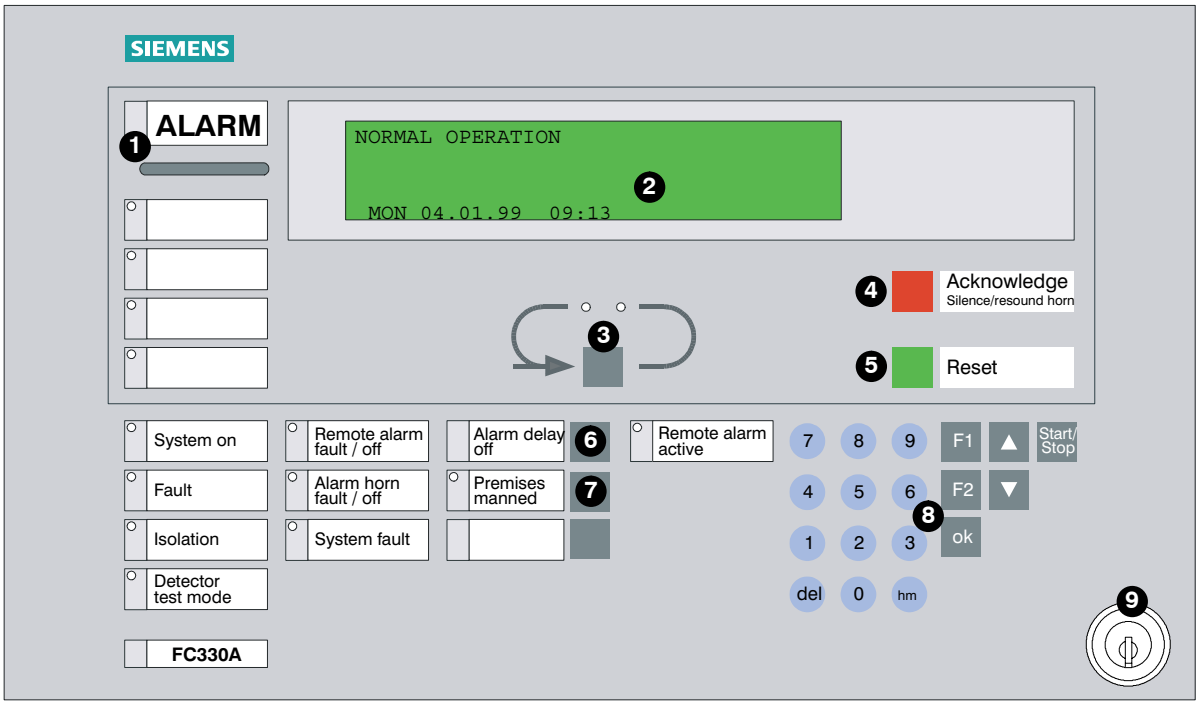
In body text you will find quotations like `display texts`, ***keys or LED–fields*** or LEDS.

Frequently used keys are shown as they look like on the console, e.g. ok.

Fundamentals

Control console layout

Control console FC330A

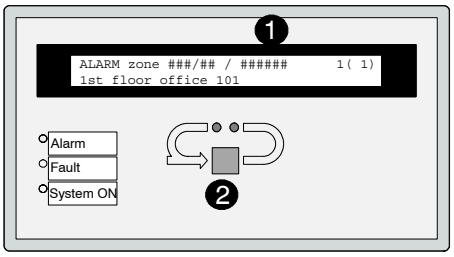


❶	ALARM LED bar	Red LED's blinking when an alarm signal is pending.
❷	Text display	Displays selection menus as well as alarm and fault messages.
❸	Scroll key	Allows scrolling of alarm messages in the text display.
❹	Acknowledge key	Confirms an alarm or a message (2 variants possible). ❒ Variant 1: 1st activation ➜ Alarm horns and buzzer off 2nd activation ➜ Reactivation alarm horns ❒ Variant 2: 1st activation ➜ Buzzer off 2nd activation ➜ Alarm horns off 3rd activation ➜ Reactivation alarm horns
❺	Reset key	Resets alarm and fault messages.
	Display fields	Indicates the operating state by an LED.
	Command fields	Possess a button to change the operating mode and may have an LED to indicate the operating state.
❻	Alarm delay off	Cancels alarm delay. Remote alarm is given immediately.
❼	Premises manned key	Toggles between "manned" and "unmanned" operating mode.
❽	Function keypad	Keys for menu–orientated operation and password input.
St	Start/Stop key	Open and close menus.
F1 F2	Function keys	Usage depends on context.
ok	Execution key	Starts the selected menu function.
▲ ▼	Move up/down key	Selects menu items upwards/downwards.
hm	Home key	Returns to the previous menu.
del	Delete key	Deletes the character left of the cursor.
❾	Keylock switch	Gives access to user operating level 2 without password. Only when keylock switch is installed.

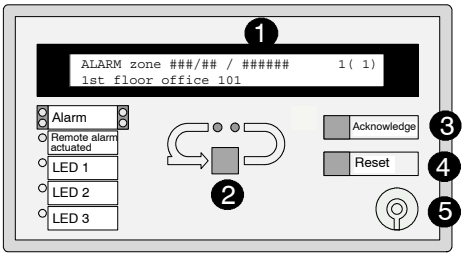
Floor panel

The floor panel is a typical local indication terminal. It mainly serves to display alarm events remotely. Secondary it is also an operating terminal to acknowledge and reset the control console from remote.

Two types of panels are available:



B3Q580



B3Q590/595

❶	Text display	Displays alarm messages.
❷	Scroll key	Allows scrolling of alarm messages in the text display. Also to initiate lamp test (press key ≥ 3 sec).
❸	Acknowledge key	Confirms an alarm or a message. activation ➜ Alarm horns and buzzer off
❹	Reset key	Resets alarm messages.
	Display fields	Indicates the operating state by an LED.
❺	Keylock switch	Gives access to user operating level 2 without password.

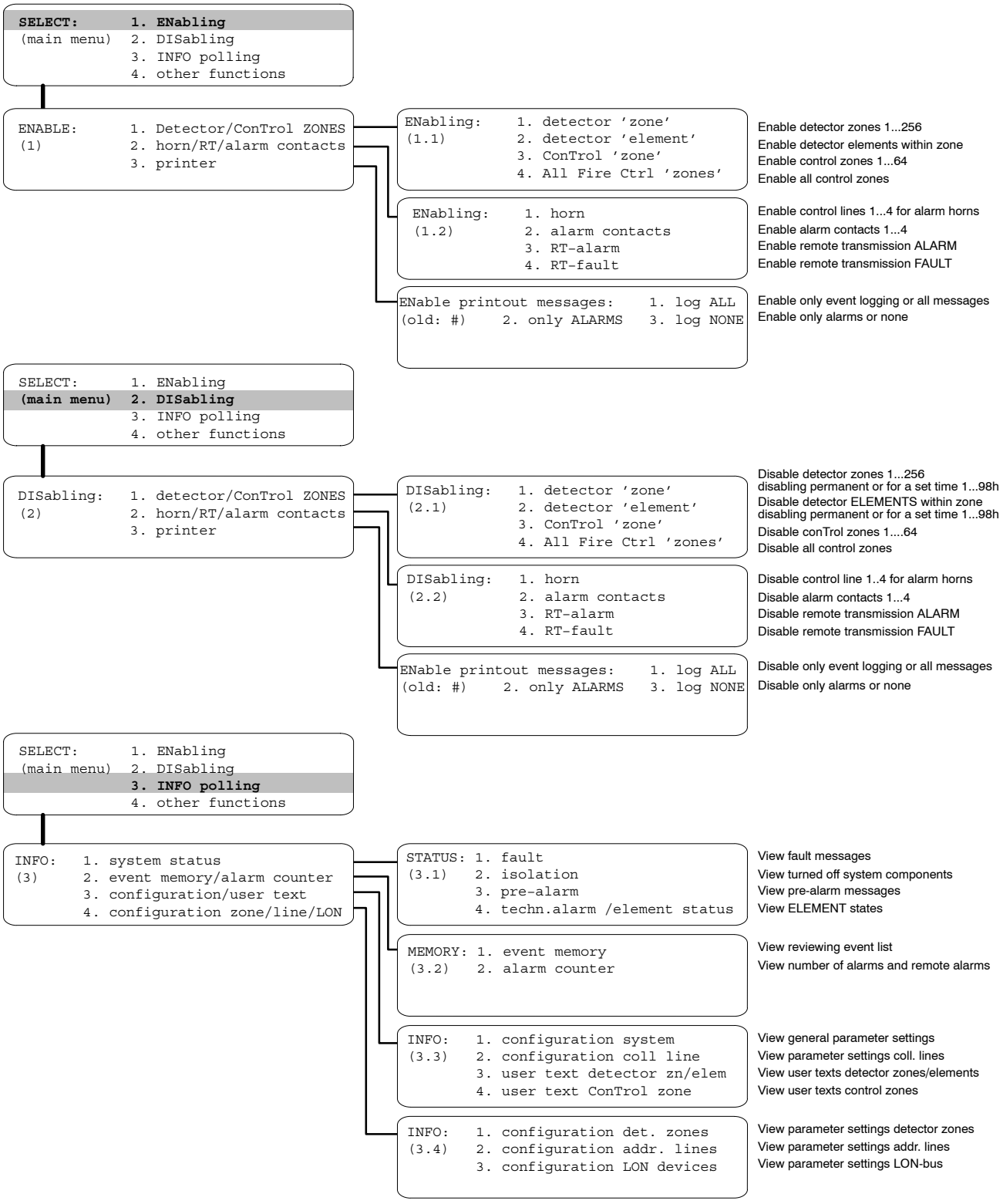
The display of the floor panel indicates the same event text as shown at the control console. It only displays one message at a time.

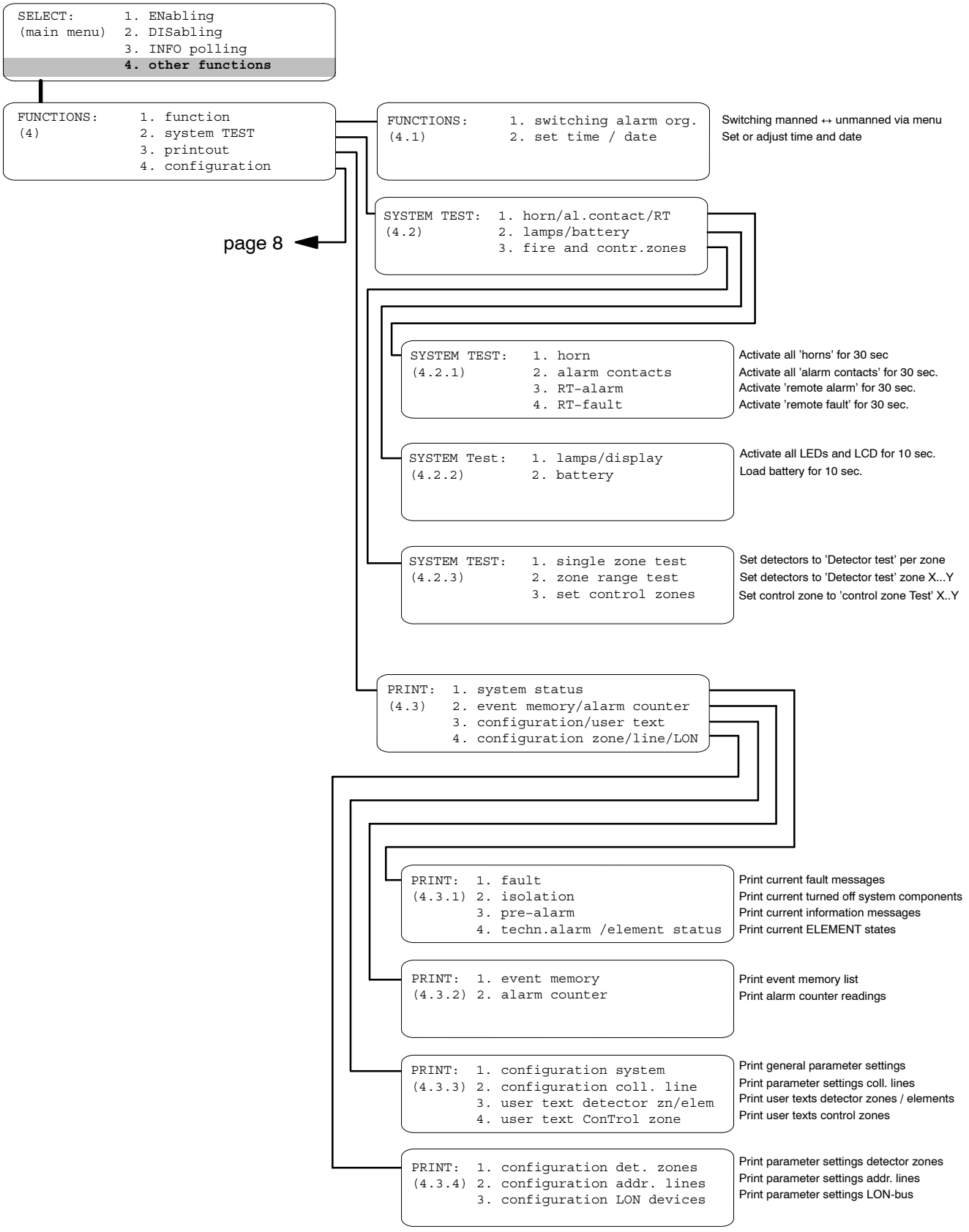
Overview operating menu

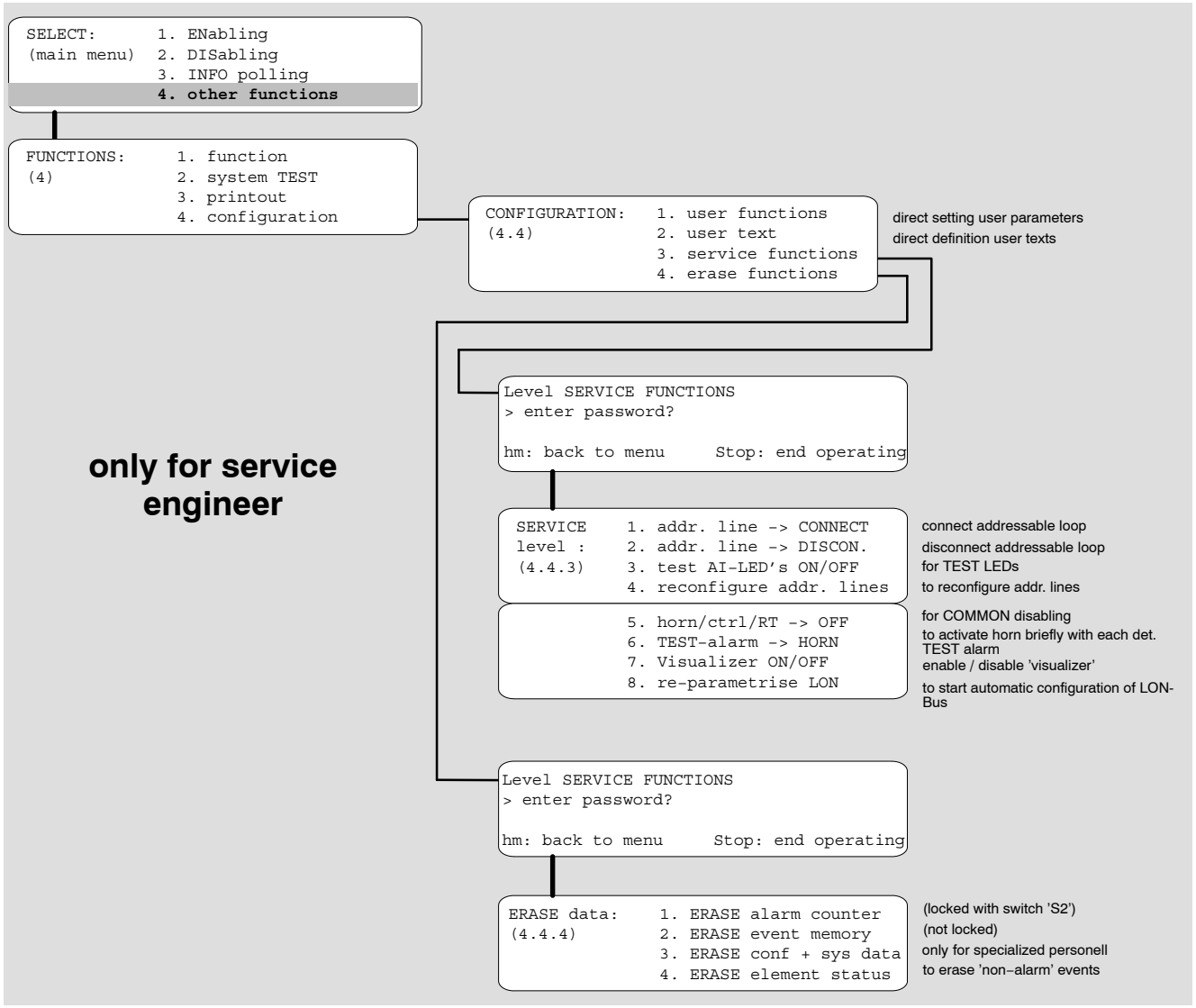
After getting operating access, the start menu appears. From the main menu, all menus can be selected (☞ page 9, fundamental operation).

With access level 2 all menu points exept `other functions - configuration` can be selected.

The passwort for access level 2 is: _____




SELECT:
(main menu)
1. ENabling
2. DISabling
3. INFO polling
4. other functions
FUNCTIONS:
(4)
1. function
2. system TEST
3. printout
4. configuration
page 8
FUNCTIONS:
(4.1)
1. switching alarm org.
2. set time / date
Switching manned ↔ unmanned via menu
Set or adjust time and date
SYSTEM TEST:
(4.2)
1. horn/al.contact/RT
2. lamps/battery
3. fire and contr.zones
SYSTEM TEST:
(4.2.1)
1. horn
2. alarm contacts
3. RT-alarm
4. RT-fault
Activate all 'horns' for 30 sec
Activate all 'alarm contacts' for 30 sec.
Activate 'remote alarm' for 30 sec.
Activate 'remote fault' for 30 sec.
SYSTEM Test:
(4.2.2)
1. lamps/display
2. battery
Activate all LEDs and LCD for 10 sec.
Load battery for 10 sec.
SYSTEM TEST:
(4.2.3)
1. single zone test
2. zone range test
3. set control zones
Set detectors to 'Detector test' per zone
Set detectors to 'Detector test' zone X...Y
Set control zone to 'control zone Test' X..Y
PRINT:
(4.3)
1. system status
2. event memory/alarm counter
3. configuration/user text
4. configuration zone/line/LON
PRINT:
(4.3.1)
1. fault
2. isolation
3. pre-alarm
4. techn.alarm /element status
Print current fault messages
Print current turned off system components
Print current information messages
Print current ELEMENT states
PRINT:
(4.3.2)
1. event memory
2. alarm counter
Print event memory list
Print alarm counter readings
PRINT:
(4.3.3)
1. configuration system
2. configuration coll. line
3. user text detector zn/elem
4. user text ConTrol zone
Print general parameter settings
Print parameter settings coll. lines
Print user texts detector zones / elements
Print user texts control zones
PRINT:
(4.3.4)
1. configuration det. zones
2. configuration addr. lines
3. configuration LON devices
Print parameter settings detector zones
Print parameter settings addr. lines
Print parameter settings LON-bus


SELECT:
(main menu)
1. ENabling
2. DISabling
3. INFO polling
4. other functions
FUNCTIONS:
(4)
1. function
2. system TEST
3. printout
4. configuration
CONFIGURATION:
(4.4)
1. user functions
2. user text
3. service functions
4. erase functions
direct setting user parameters
direct definition user texts
only for service engineer
Level SERVICE FUNCTIONS
> enter password?
hm: back to menu
Stop: end operating
SERVICE
level :
(4.4.3)
1. addr. line -> CONNECT
2. addr. line -> DISCON.
3. test AI-LED's ON/OFF
4. reconfigure addr. lines
connect addressable loop
disconnect addressable loop
for TEST LEDs
to reconfigure addr. lines
5. horn/ctrl/RT -> OFF
6. TEST-alarm -> HORN
7. Visualizer ON/OFF
8. re-parametrise LON
for COMMON disabling
to activate horn briefly with each det. TEST alarm
enable / disable 'visualizer'
to start automatic configuration of LON-Bus
Level SERVICE FUNCTIONS
> enter password?
hm: back to menu
Stop: end operating
ERASE data:
(4.4.4)
1. ERASE alarm counter
2. ERASE event memory
3. ERASE conf + sys data
4. ERASE element status
(locked with switch 'S2')
(not locked)
only for specialized personell
to erase 'non-alarm' events

How to operate the control console

To choose a menu item in the display of the console:

1. Press St.
   ➜ Display shows ---------- ☛

```
START system operating
> enter password?

                    hm /Stop: end operating
```

Access level ☞ **page 11**

2. Enter the password and press ok.
   ➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

3. Select the menu item with the ▲ and ▼ keys and press ok.
   or
   ▶ Enter the number of the menu option on the numeric keypad (e. g. option 2.).
   ➜ Display shows ---------- ☛

```
DISabling:    1. detector/ConTrol ZONES
(2)           2. horn/RT/alarm contacts
              3. printer
```

4. Repeat the selection until the required menu is displayed.
5. Follow the instructions on the display.
6. Finish the operation by pressing St.
   or
   ▶ Press hm to return to the previous menu.

Example

The following description is an example for choosing the `Disable elements` menu.

1. Press St.
2. Log in.
   ➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

3. Select option 2. with the ▲ and ▼ keys and press ok.
   or
   ▶ Enter “2”.
   ➜ Display shows ---------- ☛

```
DISabling:    1. detector/ConTrol ZONES
(2)           2. horn/RT/alarm contacts
              3. printer
```

4. Select option 1. with the ▲ and ▼ keys and press ok.
   or
   ▶ Enter “1”.
   ➜ Display shows ---------- ☛

```
DISabling:    1. detector 'zone'
(2.1)         2. detector 'element'
              3. ConTrol 'zone'
              4. All Fire Ctrl 'zones'
```

5. Select option 2. with the ▲ and ▼ keys and press ok.
   or
   ▶ Enter “2”.
   ➜ Display shows ---------- ☛

```
DISABLE element:
> zone no.? (range ### - ###)

hm: back to menu     Stop: end operating
```

Actions in the operation manual

In this operation manual, selecting a menu item will be described from now on in a short form as follows:

▶ Select option 2. ➢ 1. ➢ 2.
➜ Display shows ---------- ☛

```
DISABLE element:
> zone no.? (range ### - ###)

hm: back to menu     Stop: end operating
```

Normal operation

What is “normal operation”?

- The system is ready to receive danger messages (alarm) from the detectors.
- No fault messages are pending.
- The green LED in the display field *System on* ❶ is on.
- The illumination of the text display ❷ may be turned off, but turns on as soon as any key is pressed or an alarm, fault or status is issued.

➜ Display shows ---------- ☛

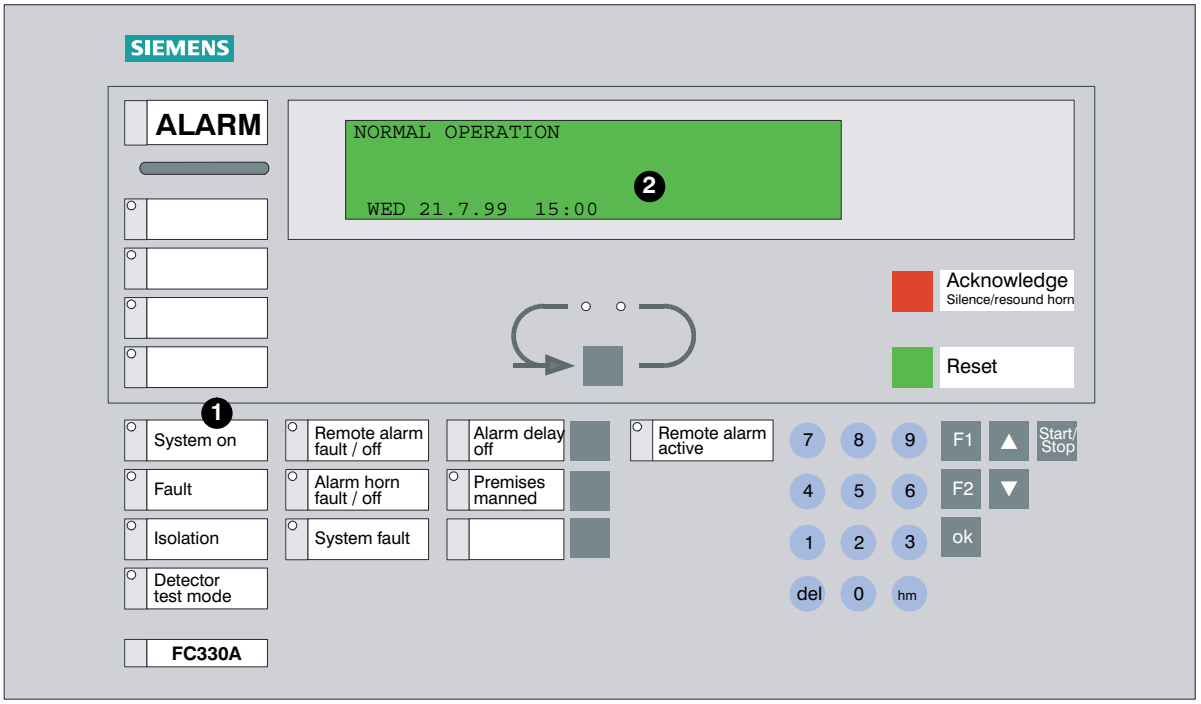
```
NORMAL OPERATION


 WED 21.7.99  15:00
```

Mains interruption

The delay is _____min
Standard default: 10 min

In case of a mains interruption the fire detection system is powered by an internal battery. No fault message is issued in the text display and the normal operation will continue , until a preset default time is expired

When the system is powered by the internal battery the green LED in the display field *System on* ❶ is blinking.



Operating access

Possible access levels

Three main access levels are defined allowing different privileges for the operation of the fire detection system. Access is provided by a four digit password for the higher access levels, respectively.

After 3 consecutive incorrect password entries the operation access is disabled for 15 minutes.

Overview of the access levels

Acknowledge messages possible:
with access level 1 ❒
with access level 2 ❒

Access level	Group of persons	Enabled operating functions
Access level 1 (no password)	everybody	– Scrolling alarm messages – Acknowledge messages
Access level 2 (password required or key–lock switch, if installed)	system operator 1 (e. g. janitor)	– Acknowledge messages – Alarm reset – Fault/Info scrolling – Isolation of system parts – Poll system information – Perform system tests
Access level 3 (various passwords to distinguish)	service engineer or system operator 2 (e. g. security officer)	– Edit user text
	service engineer	– Service functions – Erase data
	service engineer	– Application setting – Setting passwords

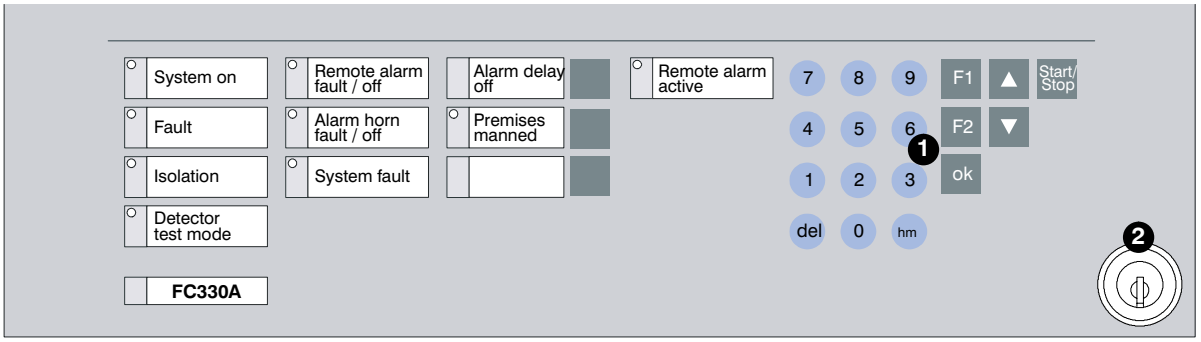
Automatic timeout

The access by password is automatically cancelled if no key is operated for:

- 5 min during state of “normal operation“
- 30 sec during condition “alarm“

How do I get operating access?

▶ Enter the password on the keypad ❶ as described below.
or
▶ Turn the keylock switch ❷ in horizontal position.
→ Access with level user operating 2 is provided as long as the key is left in horizontal position.



Operating access via password

The passwords are defined and released to the operators by the service engineer.

In case of misskeying the password, use (del) to cancel keying errors.

Log in

1. Press St.

➜ Display shows ---------- ☛

```
START system operating
> enter password?

                    hm /Stop: end operating
```

2. Enter the password and press ok.

➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

3. Proceed operating (access is now provided)

Log out

There is no log out procedure, because the operating access expires automatically if no key is pressed within a certain time (☞ page 11, Automatic timeout).

Operating “manned” and “unmanned”

SPECIAL Alarm Concept used: Yes ❒ No ❒

Basic rules

The operating states “manned” and “unmanned” are defined in a SPECIAL Alarm Concept, where signals from automatic fire detectors and manual call points are processed differently (for details ☞ page 16).

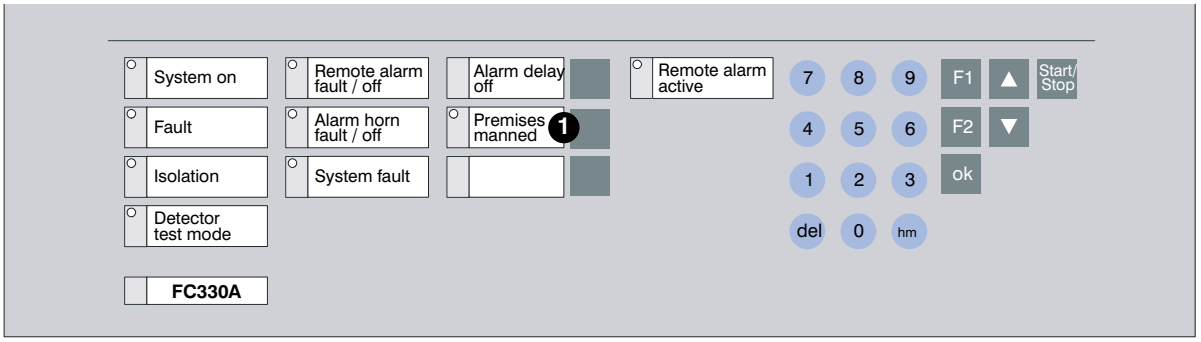
The switchover from the operating states “manned” to “unmanned” and vice versa is either done manually by the operating personnel or automatically as programmed by the service engineer.

Operating state “manned”

- The operating person, responsible for the surveillance of the system and the alarm investigation, is present on the premises.
- The LED in the display field ***Premises manned*** ❶ is on.
- The LED in the display field ***Isolation*** is on (depends on system configuration).

Operating state “unmanned”

- The responsible operating person is not present on the premises.
- The LED in the display field ***Premises manned*** ❶ is off.



Manual switching between the operating states “manned” and “unmanned”

Manual switching between the operating states “manned” and “unmanned” is only possible during defined working hours (☞ page 14, Automatic switchover).

1. Log in with ”access level 2”.
2. Press the ***Premises manned*** key on the control panel to toggle between the operating states “manned” (yellow LED is on) and “unmanned” (yellow LED is off).

   or

   ▶ Toggle between “manned” and “unmanned” via menu which is described next page.

Operating state ”unmanned”

→ Display shows ---------- ☛

```
NORMAL OPERATION


 WED 21.7.99  15:00
```

Operating state ”manned”

→ Display shows ---------- ☛

```
NORMAL OPERATION
mode 'manned'

 WED 21.7.99  15:00
```

Toggle via menu

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 1. ➢ 1.
→ Display shows ---------- ☛

```
mode 'manned' until ##:##,  1.> unmanned
sel. #,    2.> manned    3.extra time

hm: back to menu      Stop: end operating
```

3. If the operating state has to be changed to
– "manned": select option 1.
– "unmanned": select option 2.
→ If mode "manned" is selected
→ Display shows ---------- ☛ for a few seconds

```
mode 'manned' TERMINATED
> system is set to NORMAL OPERATION

timeout /hm: menu     Stop: end operating
```

Automatic switchover

The automatic switchover is used for example, to prevent the system status "manned" during nighttime when no operating personnel is present: The system switches automatically to status "unmanned" at a defined time (e. g. after the office hours). The same scheme can be used for unattended times during weekends or holidays. The automatic switchover scheme is defined by the service engineer. No user action is required.

- Automatic switchover from "manned" to "unmanned": at_____p.m.
- Automatic switchover from "unmanned" to "manned": at_____a.m.

Extra time

Function extra time
activated ❒
not activated ❒

The function "extra time" allows to set the system to manned operation for a preset time, after the automatic switchover to unmanned has taken place.

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 1. ➢ 1.
→ Display shows ---------- ☛

```
mode 'unmanned'       2. > 'manned'
 (hm = INTERRUPT)     3. extra time

hm: back to menu      Stop: end operating
```

→ The actual display depends on the initial mode, here e. g. mode unmanned (i. e. after 17:00).

3. Select option 3.
→ Display shows ---------- ☛

```
EXTRA TIME h/min? (max. ##:##)


hm: back to menu      Stop: end operating
```

Extra time max. _____

4. Enter the extra time.
→ The time until the system is set to manned mode is displayed.

Alarm

Purpose and principle

To prevent the unnecessary turn out of the fire department for minor incidents a SPECIAL Alarm Concept was developed.

It involves operating personnel in the alarming sequence and relies on two operating states:

- "unmanned" mode ➜ while the operating personnel is not present on the premises.
- "manned" mode ➜ while the operating personnel is present on the premises.

"unmanned" mode

When the system operates in "unmanned" mode, the fire brigade is called immediately when an alarm signal is issued.

"manned" mode

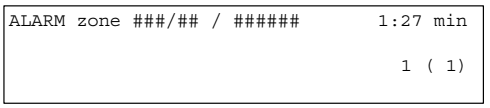
When the system operates in "manned" mode, manual call points and automatic detectors trigger different actions in the event of an alarm:

Event	Action
Manual call point is actuated	The fire brigade is summoned immediately.
Automatic fire detector responds	The fire brigade is summoned only after a preprogrammed time in which the operating personnel performs following alarm response procedure: **1.** Confirm the alarm within the alarm acknowledgement time V1 (press the ***Acknowledge*** key). **2.** Read the alarm locations on the text display. **3.** Go to these locations immediately. **4.** Decide at the face whether this is an emergency or a minor incident.
Emergency	▶ Actuate the nearest manual call point immediately! **or** ▶ Press the ***Alarm delay off*** key on the control console! ➜ The fire brigade is summoned immediately.
Minor incident	Reset the system before expiration of the alarm investigation time V2 by pressing the ***Reset*** key. ➜ The system is in the normal operation mode again.

The times V1 and V2 are only relevant, when the remote transmission is installed.

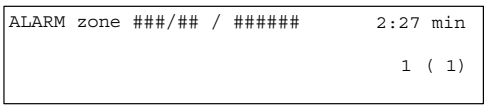
V1 = _____min. **Alarm acknowledgement time V1**

- The alarm acknowledgement time is active for automatic detectors when the system operates in “manned” mode.
- The system checks whether someone acknowledges the alarm message within this preprogrammed time.
- An alarm must be acknowledged before V1 expires, otherwise the alarm is transmitted to the fire department.
- The remaining time is indicated on the text display in minutes and seconds.



V2 = _____min. **Alarm investigation time V2**

- The alarm investigation time is active for automatic detectors when the system operates in “manned” mode.
- It limits the time for investigating the fire location to an preprogrammed length.
- On expiration of this time the alarm is transmitted to the fire department.
- In case of minor incidents, an alarm must be reset before V2 expires.
- The remaining time is indicated on the text display in minutes and seconds.



Alarm

Principle

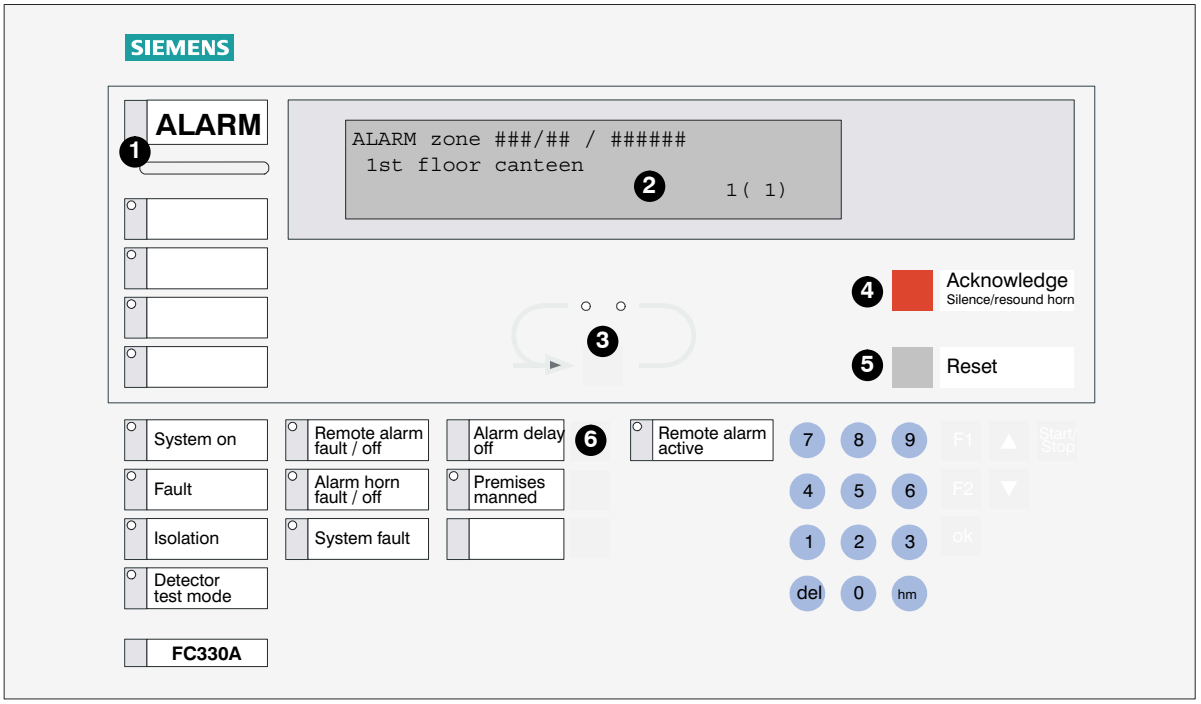
An alarm is issued by the system if an automatic detector has responded or a manual call point was actuated.

The alarm is indicated by:

- optical signals
  - blinking of the red LED alarm bar on the control console ❶
  - alarm message on the text display ❷
- acoustic signals
  - buzzer of the control console
  - attached signal horns

As described in the SPECIAL Alarm Concept, the operating personnel is involved into the alarm scheme only if the system is in “manned” mode. In all other cases, i. e. SPECIAL Alarm Concept is not activated (used) or the system operates in “unmanned” mode, the alarm is transmitted immediately to the fire brigade.

During alarm other states such as faults etc. are not shown at the display. However, it is possible to make them visible via the menu “Info polling” (For details ☞ page 49).

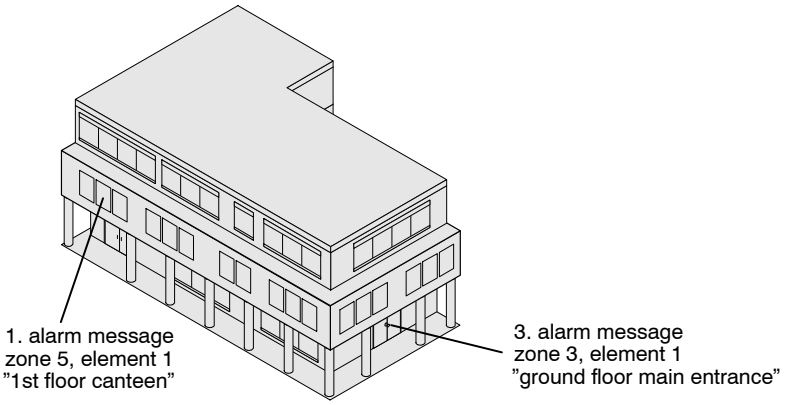


How are alarm messages shown on the text display?

A single alarm message on the text display consists of 2 lines as shown in the example to the right.The first line tells that the alarm was given in zone 5 by the element 1 of this zone, which was an automatic fire detector. The numbers at the end of the line tell, that this is the first of in total 3 alarm messages. The second line gives the explicit location of the responding detector.

```
ALARM zone ###/## / ######          1( 3)
 1st floor canteen
ALARM zone ###/## / ######          3( 3)
 ground floor main entrance
```

The 3. and the 4. line hold the same information for the last alarm message issued. In this case a manual call point was actuated in zone 3 of the building, which is located in the ground floor main entrance.



Scrolling alarm messages

Additional pending messages can be retrieved using the scroll key.

- ▶ Press the scroll key ❸ below the text display.
  → The first two lines are superseeded with the subsequent alarm message.

Retrieving supplementary informations

Supplementary informations to the alarm messages can be retrieved by using F1 and F2:

- F1 tells the type of the responding device, e. g. automatic detector.
- F2 tells the cabling address and the type number of the responding device (device address).

- ▶ Press F1 (or F2).
  → The second line in the text display is superseeded with the supplementary information.
- ▶ Press the scroll key to retrieve supplementary information of subsequent alarm messages.

How to respond in case of alarm

1. Press the ***Acknowledge*** key ❹.

What to do after an alarm

- ▶ Reset system if normal conditions appeared.
- ▶ If a manual call point was activated while the alarm, insert a new front glass in the actual call point.

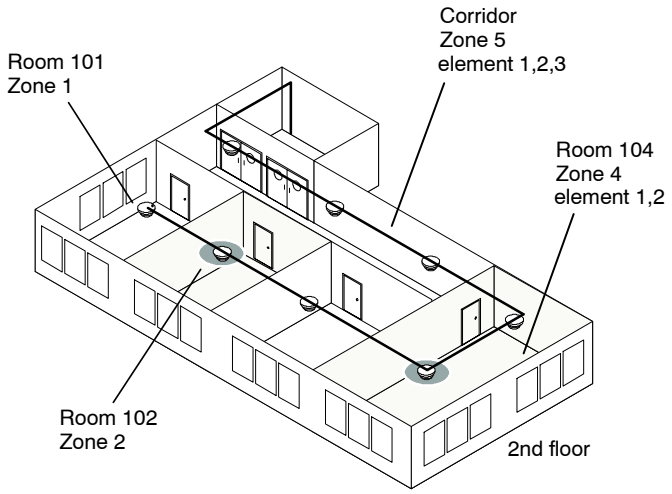
Disable/Enable System Parts

Temporary isolation of a detector zone

What is a detector zone?

The detectors and manual call points of the fire detection system are grouped into zones, which are defined according to geographical aspects of the building. Zones may be all self-contained areas of a building, for example

- single rooms
- adjacent rooms (no doors between the rooms)
- corridors
- staircases



In that way, a zone represents a “room address”. Each zone contains one or more automatic fire detector devices or manual call points.

Assignment of zones to building areas

For each zone a descriptive user text (e. g. room designation and floor no.) is defined in the system. Only in case of an alarm, this text is displayed on the text display together with the zone and device number of the responding detector.

It is recommended to prepare a list holding the assignment of zone numbers to actual rooms and building-areas.

When has a detector zone to be isolated?

In exceptional situations zones have to be isolated from the system, to prevent unintended alarm. An exceptional situation depends on the kind of the detector and exists for zones with:

- smoke detectors, if smoke or dust is produced by unusual work
- heat detectors, if heat or steam is produced by unusual work
- manual call points, if there is a possibility of inadvertent activation

WARNING

A zone that has been isolated cannot trigger any danger or fault messages! As soon as conditions have returned to normal, isolated zones have immediately to be enabled again!

Zone isolation procedure

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 2. ➤ 1. ➤ 1.

→ Display shows ---------- ☛

```
DISable zones:  (range ### to ###)
> zone no.?  (555 = all)

hm: back to menu     Stop: end operating
```

Now you can disable single zones, a range of detector zones or all zones as described below:

Disable single zones

1. Enter the desired zone number (e. g. 2).
→ Display shows ---------- ☛

```
zone ### SELECTED.  ok = SINGLE zone
> 2nd zone no.? (range ### - ###)

hm: back to menu     Stop: end operating
```

2. Press ok to disable the single zone.
→ Display shows ---------- ☛

```
zone ### SELECTED
> hours DISABLED?  (99=permanent)
```

Permanent disabling

3. Enter 99 for permanent disabling.
→ Display shows ---------- ☛

```
zone ### permanent DISABLED
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

or

Disabling for a few hours

▶ Enter the desired disabling time in full hours (e. g. 2).
→ Display shows ---------- ☛

```
zone ### DISABLED for ## hours
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

4. Press St to finish the zone disabling procedure.

or

▶ Enter another single zone number to disable.

→ Display shows ---------- ☛
→ The yellow LED ***isolation*** is on.

```
parts of system DISABLED     total:###


 WED 21.7.00  15:00
```

Disable a range of zones

1. Enter the first zone number of the range of zones to be disabled (e. g. 2).
→ Display shows ---------- ☛

```
zone ### SELECTED.  ok = SINGLE zone
> 2nd zone no.? (range ### - ###)    _

hm: back to menu     Stop: end operating
```

2. Enter the last zone number of the range of zones to be disabled (e. g. 5).
→ Display shows ---------- ☛

```
zone ### - ### SELECTED
> hours DISABLED?  (99=permanent)

hm: back to menu     Stop: end operating
```

Permanent disabling

3. Enter 99 for permanent disabling.
→ Display shows ---------- ☛

```
zones ### - ### permanent DISABLED
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

or

Disabling for a few hours

▶ Enter the desired disabling time in full hours (e. g. 2).
→ Display shows ---------- ☛

```
zones ### - ### DISABLED for ## hours
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

4. Press St to finish the zone disabling procedure.

or

▶ Enter another zone number to disable.
→ Display shows ---------- ☛
→ The yellow LED ***isolation*** is on.

```
parts of system DISABLED     total:###


 WED 21.7.00  15:00
```

Disable all zones

1. Enter `555` to disable all zones in the building.
→ Display shows ☛

```
zone ### - ### SELECTED
> hours DISABLED?  (99=permanent)

hm: back to menu     Stop: end operating
```

Permanent disabling

2. Enter `99` for permanent disabling.
→ Display shows ☛

```
zone ### permanent DISABLED
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

or

Disabling for a few hours

▶ Enter the desired disabling time in full hours (e. g. 2).
→ Display shows ☛

```
zone ### DISABLED for ## hours
(hm = end)   new zone no.?

hm: back to menu     Stop: end operating
```

3. Press St to finish the zone disabling procedure.
→ Display shows ☛
→ The yellow LED ***isolation*** is on.

```
parts of system DISABLED     total:###


 WED 21.7.00  15:00
```

Viewing disabled zones

Several zones disabled
→ Display shows ☛

```
parts of system DISABLED     total:###


 WED 21.7.00  15:00
```

1. Press key F1 to open list.
→ Display shows ☛

```
display ISOLATIONS:            total:###
(key: ↓ = forward / ↑ = backward)

F1: next section  hm/Stop: end operating
```

2. Press key ▼ to view details.
→ Display shows ☛

```
display ISOLATIONS:            total:###
zone ### - ### permanent DISABLED

↓: forward   F2:ext info    ↑: backwards
```

→ After last zone has been displayed, system turns back to overview.
→ Display shows ☛

```
parts of system DISABLED     total:###


 WED 21.7.00  15:00
```

Zone reactivation procedure

1. Press St.
→ Display shows ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 1. ➤ 1. ➤ 1.
→ Display shows ☛
→ The yellow LED ***isolation*** is off.

```
ENable zone:  (range ### to ###)
> zone no.?  (555 = all)

hm: back to menu     Stop: end operating
```

Enable single zones

1. Enter the number of a zone to be enabled (e. g. 2).
→ Display shows ---------- ☛
→ With a running timeout after which the zone is automatically enabled.

```
MONITORING zone ###, wait.
(F1 /hm = enabling)  next zone?
```

2. Enter another zone number to enable or press F1 to enable the zone before the timeout has expired.
→ Display shows ---------- ☛
for a few seconds

```
ENable zones:
> all zones ENABLED

timeout /hm: menu    Stop: end operating
```

or

3. Press hm to go back to the submenu.
→ Display shows ---------- ☛

```
ENabling:    1. detector 'zone'
(1.1)        2. detector 'element'
             3. ConTrol 'zone'
             4. All Fire Ctrl 'zones'
```

Enable a range of zones

1. Enter the first number of a zone range to be enabled (e. g. 2).
→ Display shows ---------- ☛

```
ENable zone range ### to ###
> confirm LAST zone no.?
```

2. Enter the last number of the zone range (e. g. 5).
→ Display shows ---------- ☛
→ With a running timeout after which the zone range is automatically enabled.

```
MONITORING zones ###-###, wait
(F1 /hm = enabling)  > LAST zone
```

3. Press F1 to enable all zones before the timeout has expired.
→ Display shows ---------- ☛
for a few seconds

```
ENable zones:
> all zones ENABLED

timeout /hm: menu    Stop: end operating
```

or

4. Press hm to go back to the submenu.
→ Display shows ---------- ☛

```
DISabling:   1. detector 'zone'
(2.1)        2. detector 'element'
             3. ConTrol 'zone'
             4. All Fire Ctrl 'zones'
```

Enable all disabled zones

1. Enter `555` to enable all disabled zones, no matter if all zones, a range of zones or single zones were disabled.
→ Display shows ---------- ☛
→ With a running timeout after which all zones are automatically enabled.

```
MONITORING zone ###, wait
(F1 /hm = enabling)  > LAST zone
```

2. Press F1 to enable all zones before the timeout has expired.
→ Display shows ---------- ☛
for a few seconds

```
ENable zones:
> all zones ENABLED

timeout /hm: menu    Stop: end operating
```

or

3. Press hm to go back to the submenu.
→ Display shows ---------- ☛

```
DISabling:   1. detector 'zone'
(2.1)        2. detector 'element'
             3. ConTrol 'zone'
             4. All Fire Ctrl 'zones'
```

Temporary isolation of a single detector

When has a single detector to be isolated?

Exceptional situations may occur, where it is preferable to isolate only single detector devices instead of the whole detector zone. Such situations may be for example:

- Construction work with smoke or heat development at a particular location within a large zone with a lot of detectors
- Malfunction of a detector in a zone with several detector devices

WARNING

A detector device that has been isolated cannot trigger any danger or fault messages! As soon as conditions have returned to normal, isolated detector devices have immediately to be switched on again!

If a single detector should be isolated the detector has to be identified clearly! If the detector cannot be identified clearly, the whole detector zone should be isolated. A wrong isolation of a detector can cause an unwelcome call of the fire brigade!

Single detector isolation procedure

1. Press St.
→ Display shows ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 2. ➤ 1. ➤ 2.
→ Display shows ☛

```
DISABLE element:
> zone no.? (range ### - ###)

hm: back to menu      Stop: end operating
```

3. Enter the desired zone number.
→ Display shows ☛

```
zone ### SELECTED
> element no.? (range ## - ##)

hm: back to menu      Stop: end operating
```

4. Enter the desired element number.
→ Display shows ☛

```
zone ### element ## SELECTED
> hours disabled?  (99=permanent)

hm: back to menu      Stop: end operating
```

5. Enter the desired disabling time in full hours or 99 for permanent disabling.
→ Display shows ☛
→ The yellow LED ***isolation*** is on.

```
zone ### elem. ## permanent DISABLED
> new element no.? (range ## - ##)

hm: back to menu      Stop: end operating
```

6. Press hm to finish the element disabling procedure or enter a new zone number to disable another single element.

Detector reactivation procedure

1. Press St.
   ➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 1. ➤ 1. ➤ 2.
   ➜ Display shows ---------- ☛

```
ENABLE element: (zone range ### - ###)
> zone no.?

hm: back to menu      Stop: end operating
```

3. Enter the desired zone number.
   ➜ Display shows ---------- ☛

```
ENABLE single element in zone ###:
> element no.? (range ## - ##)

timeout /hm: menu     Stop: end operating
```

4. Enter the desired element number.
   ➜ Display shows ---------- ☛

```
MONIT. zone ### elem. ##, WAIT
(F1 /hm = enabling)  next elem.?
```

5. Enter another element number to enable

   or

6. Press F1 to enable the element before the timeout has expired.

   or

7. Press hm to go back to the submenu.

Remote Transmission

Remote transmission provided:	No ❒	Yes ❒	Alarm to: _____
Fault transmission provided:	No ❒	Yes ❒	Alarm to: _____

What is “remote transmission”?

The remote transmission facility establishes a transmission path to the fire department in the event of a fire alarm issued by the fire detection system. Depending on the alarm concept, the alarm is transmitted immediately to the fire department, or after a certain delay, giving time for investigation by operating personnel.

In single cases a separate transmission path for fault messages is established.

When has the remote transmission to be disabled?

Under normal conditions the remote alarm transmission facility is enabled to ensure minimal alarming times. The remote transmission facility is disabled only in special cases to prevent unnecessary turn out of the fire brigade. The transmission facility should be disabled for:

- Test of the fire detection system
- Maintenance and conversion works on the fire detection system

WARNING

When the remote alarm transmission is disabled, no automatic alarm is transmitted to the fire department! Operating personnel must be on the premises to investigate immediately the location in case of an alarm and to alarm the fire department in case of fire!

Disabling the remote alarm transmission facility

1. Press St.
→ Display shows ---------- ☛

```
SELECT:      1. ENabling
(main menu)  2. DISabling
             3. INFO polling
             4. other functions
```

2. Select option 2. ➢ 2. ➢ 3.
→ Display shows ---------- ☛

```
DISABLE RT-alarm:
> hours DISABLED?  (99=permanent)

hm: back to menu     Stop: end operating
```

3. Enter the desired disabling time or `99` for permanent disabling.
→ Display shows ---------- ☛ for a few seconds

```
RT-alarm permanent DISABLED


timeout /hm: menu    Stop: end operating
```

→ The remote fire alarm transmission is disabled.
→ The yellow LEDs of the display fields ***Isolation*** and ***Remote alarm/fault off*** are on.
→ The text display indicates that no alarm message is pending.

Enabling the remote alarm transmission facility

1. Press St.
→ Display shows ---------- ☛

```
SELECT:      1. ENabling
(main menu)  2. DISabling
             3. INFO polling
             4. other functions
```

2. Select option 1. ➢ 2. ➢ 3.
→ Display shows ---------- ☛ for a few seconds

```
RT-alarm ENABLED


timeout /hm: menu    Stop: end operating
```

→ The remote fire alarm transmission is enabled.
→ The yellow LEDs of the display fields ***Isolation*** and ***Remote alarm/fault off*** are off, if no other parts of the system are isolated.

Disabling the remote fault transmission facility

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 2. ➤ 2. ➤ 4.

→ Display shows ---------- ☛ for a few seconds

```
RT-fault DISABLED


timeout /hm: menu    Stop: end operating
```

→ The remote fault transmission is disabled.
→ The yellow LED of the display field ***Isolation*** is on.
→ The text display indicates that no alarm message is pending.

Enabling the remote fault transmission facility

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 1. ➤ 2. ➤ 4.
→ Display shows ---------- ☛ for a few seconds

```
RT-alarm ENABLED


timeout /hm: menu    Stop: end operating
```

→ The remote fault transmission is enabled.
→ The yellow LED of the display filed ***Isolation*** is off, if no other parts of the system are isolated.

Alarm devices

When have alarm devices to be disabled?

Under normal conditions the alarm devices (e. g. horns or sirens) operate in active stand–by. They are only disabled for:

- Test of the fire detection system.
- Maintenance and conversion works on the fire detection system.

WARNING

When the alarm devices are disabled, no acoustic alarm (except the buzzer) is issued in case of fire!

Normally all acoustic devices are disabled together. Single devices or lines are only disabled in exceptional cases. For the alarm devices there are always 2 lines, in some cases 4 lines, but max. 6 lines possible.

Disabling the alarm devices

1. Press St.
   → Display shows ---------- ☛

```
SELECT:      1. ENabling
(main menu)  2. DISabling
             3. INFO polling
             4. other functions
```

2. Select option 2. ➢ 2. ➢ 1.
   → Display shows ---------- ☛

```
DISABLE horn:
> enter horn no.? (all=555)

hm: back to menu     Stop: end operating
```

3. Enter the desired horn number or 555 for disabling all horns.
   → Display shows ---------- ☛ for a few seconds

```
DISABLE horn:
> all horns DISABLED

timeout /hm: menu    Stop: end operating
```

4. Enter the number of a further device to disable.

   or

   ▶ Press St to finish the procedure.

   → The desired alarm devices are disabled.

   → The yellow LEDs of the display fields ***Isolation*** and ***Alarm horn fault/off*** are on.

   → The text display indicates that no alarm message is pending.

Enabling alarm devices

1. Press St.
   → Display shows ---------- ☛

```
SELECT:      1. ENabling
(main menu)  2. DISabling
             3. INFO polling
             4. other functions
```

2. Select option 1. ➢ 2. ➢ 1.
   → Display shows ---------- ☛

```
ENABLE horn outputs:
> enter horn no.? (all=555)

hm: back to menu     Stop: end operating
```

3. Enter the desired horn number or 555 to enable all horns.
   → Display shows ---------- ☛ for a few seconds

```
ENABLE horn outputs:
> all horn outputs ENABLED

timeout /hm: menu    Stop: end operating
```

4. Enter the number of a further device to disable.

   or

   ▶ Press St to finish the procedure.

   → The desired alarm devices are enabled.

   → The yellow LEDs of the display fields ***Isolation*** and ***Alarm horn fault/off*** are off, if no other parts of the system are isolated.

Faults

Faults

How do I respond to fault messages?

Fault messages are issued on the text display if a malfunction in the system, the cabling or the attached devices is detected. Additionally the LED in the ***fault*** display field is blinking.

1. Confirm the message by pressing the ***Acknowledge*** key.
   → The yellow LED in the ***fault*** display field changes from blinking to constant on.
2. Read the fault message on the display and decide, whether the fault can be remedied by the user (see next paragraph: What remedies are available to the user).
3. To cancel the fault message after the fault is remedied, press the ***Reset*** key.

WARNING

If the fault cannot remedied by the user, immediately call the SIEMENS service organization!

What remedies are available to the user?

Only a few faults can be remedied by the user. These are listed below. For all other faults call the SIEMENS service organization**.**

Defective or missing detector

→ Display shows ---------- ☛

```
FAULT message(s):            total:###
zone ### elem. ##: dev. DEFECTIVE

 TUE 27.7.99  10:35
```

or

→ Display shows ---------- ☛

```
FAULT message(s):            total:###
zone ### elem. ##: NO RESPONSE

 TUE 27.7.99  10:35
```

Broken glass on manual call point

→ Display shows ---------- ☛

→ Manual call point with broken glass is flashing

```
FAULT message(s):            total:###
zone ### elem ##: Broken glass

 TUE 27.7.99  10:35
```

- ▶ If a detector is missing, insert a detector of the same type into the detector base.
- ▶ If a detector is damaged, replace it with a detector of the same type and order a new reserve detector from the SIEMENS service organization**.**
- ▶ If a manual call point has been operated and the glass is broken, replace it, then press the key ***Reset***.

Mains POWER OFF

→ Display shows ---------- ☛

```
FAULT message(s):            total:###
EARTH FAULT to 24V

 TUE 27.7.99  10:35
```

Emergency power supply: _____h

- ■ If the public power supply is down, no action is required. The emergency battery supplies the system for several hours (according to local requirements at least 12 h, max. 72 h), depending on the size of the emergency battery.
- ■ If the outage is not in the public power supply:

1. Check the power fuse at the main distribution panel of the building.
2. If the fuse is blown, replace the fuse.

Printer out of paper

- ▶ Insert a new paper roll (☞ page 45, Printer: Paper replenishing).

Maintenance

Detector test

Purpose and Principle

For function tests of the automatic fire detectors and the manual call points, zones of the fire detection system are set into the “detector test mode”. In the detector test mode a responding detector or manual call point triggers only a test alarm.

This allows individual on–site function tests, where automatic fire detectors deliberately are triggered by means of special detector test equipement.

Manual call points are triggered either with a special test key or by opening the cover and actuating the button.

Test alarm

A test alarm generates no danger message on the control console. Acoustic alarm devices, the remote alarm transmission or any other control functions are not activated.

A test alarm is indicated on the text display of the control console as `test–ALARM ZONE #`. It is recorded in the event memory and automatically logged, if a printer is connected.

Frequency

Visual control of detectors and manual call points: Once a year.

Testing of all detectors and manual call points: Once every two years.

Differing national or local regulations always have priority!

Recommendations for function tests

- Perform the function tests periodically. The frequency of function tests is determined by the service engineer.
- Switch only the fire detectors of a few zones at a time to detector test mode, never the entire building.
- For manual call points the function test needs to be performed only according to a sampling plan, designed by the service engineer.
- Test automatic fire detectors and manual call points separately. Never switch them to detector test mode simultaneously.

WARNING

A zone in detector test mode cannot trigger any danger or fault messages!

After completion of the test work immediatly set the fire detection system back to normal operation!

Set only a few zones at a time to detector test mode, never all zones at the same time!

Setting single detector zones into detector test mode

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 2. ➢ 3. ➢ 1.
→ Display shows ---------- ☛

```
No 'DET. TEST' mode, set single zone(s):
> zone no.?  (max. 4)

hm: back to menu      Stop: end operating
```

3. Enter the desired zone numbers (e. g. 1 and 2; max. 4 zones). Use the ok key to separate the numbers and the del key to cancel keying errors.

4. After entering the last number press ok twice.
   ➜ Display shows ---------- ☛ for a few seconds
   ➜ The selected detector zones are set into detector test mode.
   ➜ Display shows ---------- ☛
   ➜ The yellow LED of the display field ***detector test mode*** are on.

```
Mode 'DET. TEST' zones: ###,###,###,###
Outputs NOT activated

timeout /hm: menu    Stop: end operating
```

```
Mode 'DET. TEST' zones: ###,###,###,###
Mode 'DET. TEST' range: ### - ###

 TUE 27.7.99  10:35
```

Setting a zone range or all detectors into detector test mode

1. Press St.
   ➜ Display shows ---------- ☛
2. Select option 4. ➢ 2. ➢ 3. ➢ 2.
   ➜ Display shows ---------- ☛
3. Enter the first number of the desired zone range (e. g. 2) or `555` for testing all zones.
   ➜ Display shows ---------- ☛ for a few seconds
4. Enter the last number of the desired zone range (e. g. 5).
   ➜ Display shows ---------- ☛
   ➜ The selected zone range is set into detector test mode.
   ➜ Display shows ---------- ☛

```
 SELECT:       1. ENabling
 (main menu)   2. DISabling
               3. INFO polling
               4. other functions
```

```
No 'DET.TEST' mode, set range ### - ###:
> zone no.?  (555=all, 0=end)
```

```
zone range ### - ### in 'DET. TEST' mode
Outputs NOT activated

timeout /hm: menu    Stop: end operating
```

```
zone ### SELECTED.  ok = SINGLE zone
> 2nd zone no.? (range ### - ###)
```

```
Mode 'DET. TEST' zones: ###,###,###,###
Mode 'DET. TEST' range: ### - ###

 TUE 27.7.99 10:35
```

Terminating the detector test mode for single zones

1. Press St.
   ➜ Display shows ---------- ☛
2. Select option 4. ➢ 2. ➢ 3. ➢ 1.
   ➜ Display shows ---------- ☛
3. Press del to delete all displayed zone numbers and enter "0" (zero) instead.
4. Press ok twice.
   ➜ Display shows ---------- ☛ for a few seconds
   ➜ The detector test mode is terminated for all detector zones.

```
 SELECT:       1. ENabling
 (main menu)   2. DISabling
               3. INFO polling
               4. other functions
```

```
No 'DET. TEST' mode, set single zone(s):
> zone no.?  (max. 4)

hm: back to menu     Stop: end operating
```

```
'DET. TEST' mode TERMINATED


timeout /hm: menu    Stop: end operating
```

Terminating the detector test mode for a zone range

1. Press St.
   ➜ Display shows ---------- ☛
2. Select option 4. ➢ 2. ➢ 3. ➢ 2.
   ➜ Display shows ---------- ☛
3. Enter "0" (zero) and press ok.
   ➜ Display shows ---------- ☛ for a few seconds
   ➜ The detector test mode is terminated for all detector zones.

```
 SELECT:       1. ENabling
 (main menu)   2. DISabling
               3. INFO polling
               4. other functions
```

```
No 'DET.TEST' mode, set range ### - ###:
> zone no.?  (555=all, 0=end)

hm: back to menu     Stop: end operating
```

```
'DET. TEST' mode TERMINATED


timeout /hm: menu    Stop: end operating
```

Functional testing of automatic AlgoRex-detectors

Required equipement

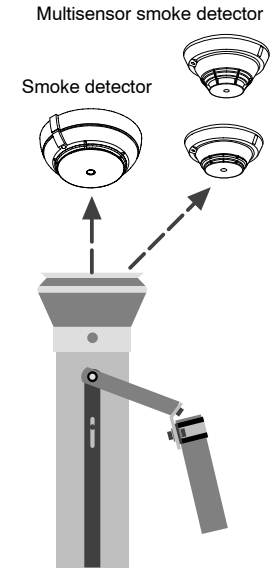
There are basically two kinds of automatic fire detectors: heat detectors and smoke detectors. For heat detectors the detector tester RE6T is required, which simulates the temperatur rise with a hot air blower.

Smoke detectors exist also as the variation multisensor smoke detector. Both are tested with the detector tester RE6, which also can be used as tool for the detector exchange. Smoke is detected by its light scattering, which is optically simulated by the detector tester RE6.

Identification of detectors

Smoke detectors, multisensor smoke detectors and heat detectors can be identified by their housing, see illustration.

▶ If the tested detector did not respond, exchange the detector unit.

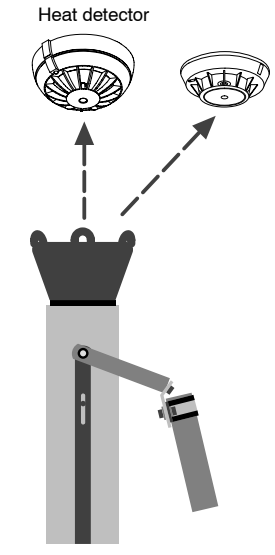


Detector tester RE6 (gas)

Test procedure for detector tester RE6

1. Set the desired zone into detector test mode (☞ page 34).
2. Set the detector tester onto the detector and press for 1 second.
3. Wait until the response indicator (red LED) located in the detector housing flashes.
4. Possibly press again after 15 – 20 seconds for 1 second.
5. Remove the detector tester.
   ➜ The functional testing is completed.

▶ If the tested detector did not respond, check the gas can inside the detector tester RE6 or the battery inside the tester DZ1193. If defective detectors are found call the SIEMENS service organization.



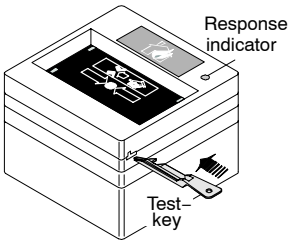
Detector tester RE6T

Test procedure for detector tester RE6T

1. Set the desired zone into detector tes mode (☞ page 34).
2. Set the detector tester onto the detector.
3. Wait until the response indicator (red LED) located in the detector housing flashes.
4. Remove the detector tester.
   ➜ The functional testing is completed.

▶ If the tested detector did not respond, exchange the detector unit.

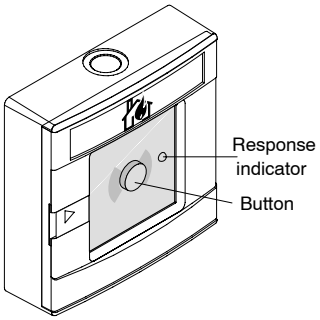
Functional test of manual call points



Test procedure for type KAC

1. Set the desired zone into detector test mode (☞ page 34).
2. Insert the test key into the opening at the lower left side of the housing.
   → A test alarm is simulated.
3. Observe, whether the response indicator near the upper right corner of the housing flashes.
4. Remove the test key.
   → The functional testing is completed.

▶ If the tested manual call point did not respond, call the SIEMENS service organization.



Test procedure for type DIN (indirect activation)

1. Set the desired zone into detector test mode (☞ page 34).
2. Open the housing of the manual call point with the key.
3. Press down the button completely.
   → A test alarm is simulated.
4. Observe, whether the response indicator, a red LED to the right of the button, flashes.
5. Close the housing.
   → The functional testing is completed.

▶ If the tested manual call point did not respond, call the SIEMENS service organization.

Control console

→ Display shows ---------- ☛

```
mode 'detector TEST' ACTIVE
> test-ALARM zone ###/##

 WED 21.7.99  15:00
```

▶ Each test alarm is indicated in the display for a few seconds and also registered in the event memory.

Lamp test

Purpose of the lamp test

Alarms, faults and operating state of the fire detection system are indicated by LEDs in the display fields, the text display and the alarm buzzer of the control console.

To check the correct function of these parts the lamp test can be initiated: All visual and audible devices of the control console are activated for a few seconds.

Frequency

The lamps have to be tested at least once a year.

Lamp test procedure

1. Press St.
   ➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 2. ➢ 2. ➢ 1.
   ➜ To initiate the lamp test.
   ➜ Display shows ---------- ☛

```
TESTING lamps and display:
> remaining time                (→← ↓↑)
.....................................
.....................................
```

3. Check:
   – all LEDs on?
   – buzzer audible?
   – missing segments in text display?

If one or more devices are malfunctional, call the SIEMENS service organization.

Lamp test on local indication and control panels ☞ page 5.

Battery load test

Purpose and principle

In case of mains interruption the power supply of the fire detection system relies on an internal battery pack. The capacity of the battery pack is sufficent to keep the system for a couple of hours operating (☞ page 32, Faults). As the lifetime of batteries is limited, a battery load test has to be performed periodically to ensure a good condition of the battery pack: For 10 seconds the battery is highly loaded and the battery voltage is monitored. If the voltage drop is beyond a certain value, the battery pack has to be replaced.

Frequency

The batterie test is automatically performed by the system every 24 hours. If the battery is damaged, or provides only an insufficent capacity, a fault messages is displayed.

Once a year the battery test has to be performed manually.

Battery load test procedure

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➤ 2. ➤ 2. ➤ 2.
→ To initiate the battery load test.
→ Display shows ---------- ☛

```
TESTING battery:
> remaining time for load test

hm: stop test          Stop: end operating
```

→ If the battery test is completed, the system shows the result.
→ Display shows ---------- ☛ for a few seconds

```
RESULT battery test:
> battery OK.

timeout /hm: menu     Stop: end operating
```

If the battery load test yields insufficent battery capacity, call the SIEMENS service organization to replace the battery.

Test of acoustic alarm devices

Purpose and principle

The fire detection system is equipped with acoustic alarm devices distributed throughout the building to alarm the fire brigade in case of fire. The function of the acoustic alarm devices has to be checked periodically. The “horn test” activates all acoustic alarm devices for 30 seconds.

Frequency

The acoustic alarm devices have to be tested at least once a year.

Horn test procedure

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 2. ➢ 1. ➢ 1.
→ To initiate the horn test.
→ Display shows ---------- ☛
→ The horn test runs for 30 seconds.
→ The remaining time is indicated.
→ After the test has finished, the submenu is displayed again.

```
TESTING horn:
> remaining active time

hm: stop test        Stop: end operating
```

If an acoustic device did not respond in the test, call the SIEMENS service organization for replacement or repair.

▶ The horn test can be stopped before expiration of the 30 seconds by pressing hm.

Test of Remote Transmission (RT)

Purpose and principle

In test mode the function of the remote transmission can be tested without activating an alarm device or a manual call point.

The function of the remote transmission facility has to be checked periodically. The remote alarm transmission and the remote fault transmission can be tested separately.

Frequency

The acoustic alarm devices have to be tested at least once a year.

Before the remote alarm transmission is tested, inform the fire brigade!

Test procedure for remote alarm transmission

1. Inform the fire brigade before a remote alarm transmission test will be performed.

2. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

3. Select option 4. ➢ 2. ➢ 1. ➢ 3.
→ To initiate the remote ALARM test.
→ Display shows ---------- ☛

```
ATTENTION: testing remote transm. ALARM!
>> fire brigade notified? > then: ok

hm: back to menu      Stop: end operating
```

4. If the fire brigade is informed, press ok.
→ Display shows ---------- ☛
→ The test runs for 30 sec. The remaining time is indicated.
→ After the test has finished, the submenu is displayed again.

```
TESTING remote transm. ALARM (RT-alarm):
> remaining active time

hm: stop test         Stop: end operating
```

If the remote alarm did not arrive at the fire departement, call the SIEMENS service organization for repair.

▶ The test can be stopped before expiration of the 30 seconds by pressing hm.

Test procedure for remote fault transmission

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 2. ➢ 1. ➢ 4.
→ To initiate the remote FAULT test.
→ Display shows ---------- ☛
→ The test runs for 30 sec. The remaining time is indicated.
→ After the test has finished, the submenu is displayed again.

```
TESTING remote transm. FAULT (RT-fault):
> remaining active time

hm: stop test         Stop: end operating
```

If the fault message did not arrive at the remote location, call the SIEMENS service organization for repair.

▶ The test can be stopped before expiration of the 30 seconds by pressing hm.

Other Functions

Printer disabling/enabling

Printer connected: Yes ❒ No ❒

When has the printer to be disabled?

Under normal conditions the printer operates in active stand-by. It is only disabled in special cases e. g. for change of paper or repair.

Disabling the printer

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 2. ➤ 3. ➤ 3. (to disable the printing of all messages)
→ Display shows ---------- ☛ for a few seconds

```
printer DISABLED


timeout /hm: menu     Stop: end operating
```

→ The printer is disabled.
→ The yellow LED of the display field ***Isolation*** is on.

Enabling the printer

1. Press St.
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 1. ➤ 3. ➤ 1.
→ Display shows ---------- ☛ for a few seconds

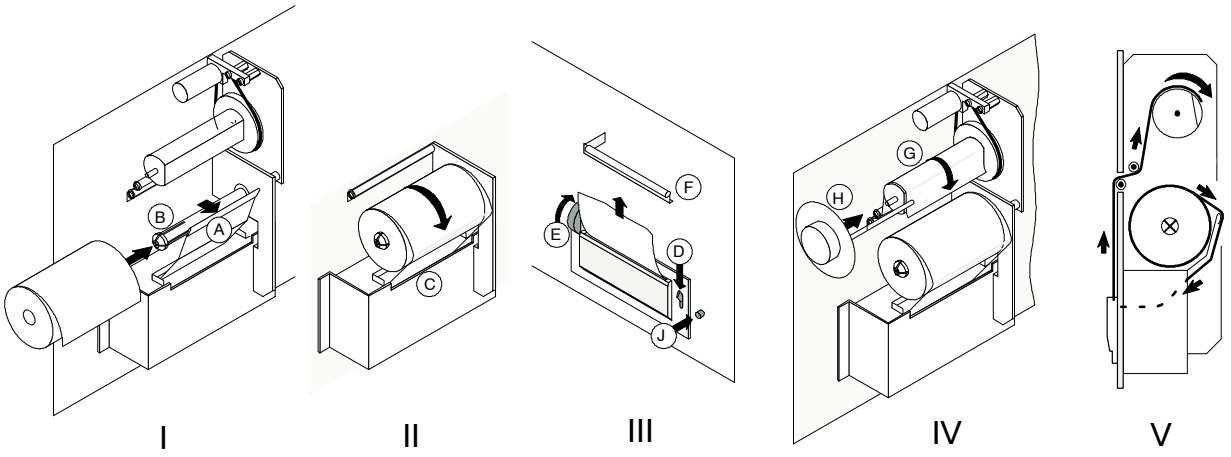
```
printer ACTIVE: log ALL messages


timeout /hm: menu     Stop: end operating
```

→ The printer is enabled.
→ The yellow LED of the display field ***Isolation*** is off, if no other parts of the system are isolated.

Paper replacement with logging printer B2Q191

Switch off the printer

Before changing the printer paper disable the printer by the control panel menu (☞ page 44).



Change of printer paper

1. Remove the screws on the right−hand side or open the hinged cover with the key.
2. Swing out the printer unit.
3. Undo the clamp H and remove the used paper roll (see picture IV).
4. Lift the paper flap A and attach the a new paper roll on the spindle B. Assure that the moving direction of the paper roll is clockwise (see picture I).
5. Press the leading edge of the paper tape lightly against the flap A and feed it through slot C into the printer (see picture II).
6. Press down the release lever D and shove the paper tape through the printer (see picture III).
7. Relinquish release lever D. The paper can now be transported by means of the knurled wheel E (see picture III).
8. Feed the paper tape through slot F.
9. Thread the leading edge of the paper around the take−up roller G and fix it with clamp H (see pictures IV and V).
10. Press the winding up key J (see picture III) to wind up the paper and to reset of the “End of paper” fault.

Enable the printer

After changing the printer paper, enable the printer by the control panel menu (☞ page 44).

Spare paper rolls

Following types of paper rolls are available for the printer:

- part no. 279 977 (4 pieces)
- JUJU TP 50KS−A
- HOSHU PS 65 B1
- MITSUBISHI F−200 U7X

Print intensity

If the print intensity is too low, call the SIEMENS service organization.

Poll alarm counter

Purpose of polling the alarm counter

The alarm counter allows to get information about the number of alarms and remote alarms in the past.

Polling the alarm counter

1. Press St.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➤ 2. ➤ 2.
➜ Display shows ---------- ☛
for a few seconds
➜ The submenu is displayed.

```
ALARM COUNTER:          alarms: ###
                 remote alarms: ###

timeout /hm: menu    Stop: end operating
```

3. Use St to terminate the alarm counter polling.

Poll event memory

Purpose of polling the event memory

The event memory allows to get information about events registered by the fire detection system in the past. Always the last 200 events are registered by the system.

Polling the event memory

1. Press [St].
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➤ 2. ➤ 1.
→ Display shows ---------- ☛

```
viewing EVENT MEMORY:   total events ###
(key: ↓ = forward / ↑ = backward)

hm: back to menu     Stop: end operating
```

3. Use [▲] and [▼] to scroll through the events.
→ The first line tells the event number and the date and time of its occurance, the second line reproduces the corresponding event message.
→ Display shows ---------- ☛

```
viewing EVENT no ##: ##.##.##  ##:##:##
 event text ...........

↓: forward                    ↑: backwards
```

4. Use (hm) to go back to the submenu or [St] to terminate the event memory polling.

Poll user text of zones or elements

Purpose

The assignment of the zone numbers to the descriptive user text is stored in the memory of the fire detection system and can be displayed on the text display of the control console.

Polling user text of zones or elements

1. Press [St].
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➢ 3. ➢ 3.
➜ Display shows ---------- ☛

```
display of USER TEXT for ### ZONES/ELEM:
(key: ↓ = forward / ↑ = backward)

hm: back to menu      Stop: end operating
```

3. Use [▲] and [▼] to scroll through the zones.
➜ The first line tells the zone number, the second and third line reproduces the corresponding user text.
➜ Display shows ---------- ☛

```
display USER text of zone ###:
 zone ###/ -: ######
 ground floor main entrance
↓: forward                    ↑: backwards
```

4. Use (hm) to go back to the submenu or [St] to terminate the user text polling.

Poll system status

Purpose

After acknowledging messages from various system states differing from “normal operation” as “isolation” or “fault”, detailed information may be no longer visible on the text display. Only the LEDs of the display fields and a more general message like “parts of the system isolated” on the text display indicate a special system state. More detailed informations e. g. which zones are isolated, or which elements are faulty can be retrieved by polling the system status at any time.

Polling the system status

1. Press [St].
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➢ 1.
→ Display shows ---------- ☛

```
STATUS: 1. fault
(3.1)   2. isolation
        3. pre-alarm
        4. techn.alarm /element status
```

3. Select option 1.
→ A scroll page for the selected item is displayed, here for example for “fault“.
→ Display shows ---------- ☛

```
display FAULT messages:          total:##
(key: ↓ = forward / ↑ = backward)

hm: back to menu     Stop: end operating
```

4. Use [▲] and [▼] to scroll through the messages.
→ Display shows ---------- ☛

```
display FAULT messages:          total:##
 fault messages.............

↓: forward                    ↑: backwards
```

5. Use (hm) to go back to the submenu or [St] to terminate the system status polling.

Poll configuration data

Purpose

The polling of configuration data is only relevant for the service engineer, for controlling user functions without the configuration tool.

Polling configuration data of detector zones

1. Press [St].
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➤ 4. ➤ 1.
→ Display shows ---------- ☛

```
Select ZONES:  (range ### to ###)
Enter ZONE no.?  (555 = all)
```

3. Enter the desired zone number or `555` to select all zones and press [ok].
→ Display shows ---------- ☛

```
ZONE information for ### ZONES/ELEM:
↓: forward                  ↑: backwards

hm: back to menu     Stop: end operating
```

4. Press [ok] to select only a single zone or enter the number of the last zone of the desired range and press [ok].
→ Display shows ---------- ☛

```
ZONE ### selected.  ok = single ZONE
Second ZONE No.? (range ### - ###)
```

5. Use [▲] and [▼] to scroll through the configuration data of each selected zone.
→ Display shows ---------- ☛

```
Zn ###:###### tst:######dis:######## el
ele ##     name=###### type=######
al=###### incr=###### dr=######
trouble=######          ln ##  dev ##
```

6. Use (hm) to go back to the submenu or [St] to terminate the configuration data polling.

Polling configuration data of address lines

1. Press [St].
→ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 3. ➤ 4. ➤ 2.
→ Display shows ---------- ☛

```
Select LINES:  (range ## to ##)
Enter line no.?  (555 = all)
```

3. Enter the desired line number or `555` to select all lines and press [ok].
→ Display shows ---------- ☛

```
LINE information for ## LINES:
↓: forward                  ↑: backwards

hm: back to menu     Stop: end operating
```

4. Press [ok] to select only a single line or enter the number of the last line of the desired range and press [ok].
→ Display shows ---------- ☛

```
LINE ## selected.  ok = single line
Second line no.? (range ## - ##)
```

5. Use [▲] and [▼] to scroll through the configuration data of each device of the selected line.
→ Display shows ---------- ☛

```
line ###: ######, ### devices
device ### name=###### type=######
al=###### incr=###### dr=######
trouble=######           zn ### el ##
```

6. Use (hm) to go back to the submenu or [St] to terminate the configuration data polling.

Printout

All informations that can be polled also can be printed, if a printer is connected.

Print system status

1. Press St.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 3. ➢ 1.
➜ Display shows ---------- ☛

```
PRINT:  1. fault
(4.3.1) 2. isolation
        3. pre-alarm
        4. techn.alarm /element status
```

3. Select the information to be printed.
➜ Display shows ---------- ☛

```
PRINTOUT in process:


hm: stop print       Stop: end operating
```

Print event memory/alarm counter

1. Press St.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 3. ➢ 2.
➜ Display shows ---------- ☛

```
PRINT:  1. event memory
(4.3.2) 2. alarm counter
```

3. Select the information to be printed.
➜ Display shows ---------- ☛

```
PRINTOUT in process:


hm: stop print       Stop: end operating
```

Print configuration/user text

1. Press St.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 3. ➢ 3.
➜ Display shows ---------- ☛

```
PRINT:  1. configuration system
(4.3.3) 2. configuration coll. line
        3. user text detector zn/elem
        4. user text ConTrol zone
```

3. Select the information to be printed.
➜ Display shows ---------- ☛

```
PRINTOUT in process:


hm: stop print       Stop: end operating
```

Print configuration zone/line/LON

1. Press St.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

2. Select option 4. ➢ 3. ➢ 4.
➜ Display shows ---------- ☛

```
PRINT:  1. configuration det. zones
(4.3.4) 2. configuration addr. lines
        3. configuration LON devices
```

3. Select the information to be printed.
➜ Display shows ---------- ☛

```
PRINTOUT in process:


hm: stop print       Stop: end operating
```

Set time and date

Changeover summertime to wintertime: manually ❒ automatically ❒

Purpuse and Principle

Time and date are set by the service engineer when the system is put into service. Under normal conditions there is no need to correct time and date.

The changeover from summertime to wintertime and vice versa is performed automatically for Central European Time. Central European Time is valid for Western Europe, most of Eastern Europe an parts of Russia. The switchover from summertime to wintertime is performed at the last sunday in March, vise versa at the last sunday in October. Differing automatic switching times are not possible.

Only due to an electronical distortion or a complete power failure (mains and battery interrupted) the system sets time and date to “default”.

Set time and date

Log in with at least ”access level 2”.

1. Press St.
➜ Display shows ---------- ☛

```
START system operating
> enter password?

                    hm /Stop: end operating
```

2. Enter the password and press ok.
➜ Display shows ---------- ☛

```
SELECT:       1. ENabling
(main menu)   2. DISabling
              3. INFO polling
              4. other functions
```

3. Select option 4. ➢ 1. ➢ 2.
➜ Display shows ---------- ☛

```
set TIME:               ##:##:##
> new time: hour.min.sec.?

hm: back to menu      Stop: end operating
```

4. Enter the current time and press ok.
➜ Display shows ---------- ☛

```
set DATE:               ##.##.##
> new date: day.mon.year?

hm: back to menu      Stop: end operating
```

5. Enter the current date and press ok.
➜ Time and date are set to the current values.
➜ Display shows ---------- ☛

```
FUNCTIONS:      1. switching alarm org.
(4.1)           2. set time / date
```

6. Use St to terminate the time and date setting.

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