

GMC+
FIRE ALARM CONTROL PANEL
USER MANUAL

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1 GENERAL

The fire alarm installation consists of two major parts, namely the actual control panel and the loops with the alarms.

By alarms we mean both the manual alarms (pushbuttons) and the automatic alarms (detectors).

The alarms are linked to the control panel by a two-core cable to which multiple alarms can be connected. Such a two-core cable is called a loop. Several loops can be connected to a single control panel.

Zones are defined that correspond to the actual layout of the building. These are groups of alarms that belong together geographically, but do not have to be connected to the same loop.

Each alarm has a unique address. Each alarm communicates bi-directionally with the control panel and transmits its sensor levels in that way.

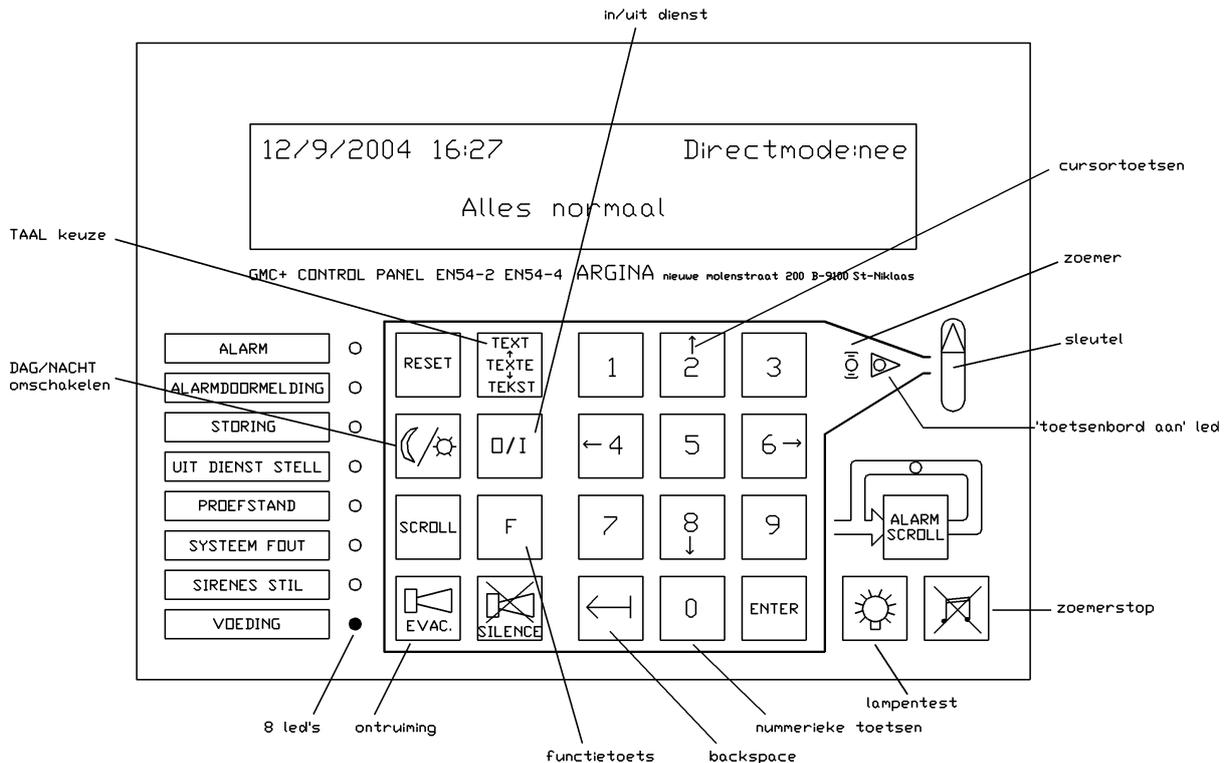
Depending on the size of the building, there is either a single GMC+ with integral operating panel or a number of linked control panels with operating panels distributed throughout the building.

This manual contains the term 'alarm devices'. This means:

- Indicating equipment: sirens, bells, flashing lights, spoken announcements via the PA system, pagers, telephone transmitting equipment with spoken messages or digital reports to a control room.
- Fire retarding equipment: door magnets, smoke curtains, extinguishing equipment.
- Safety measures: disabling lifts and closing gas valves.

2 THE CONTROL PANEL

2.1 The meaning of the various lamps (LEDs)



- POWER LED: green LED is lit while the control panel is working.
- FAULT LED: yellow LED lights when the control panel detects an abnormal situation.
- ALARM LED: red LED that lights when the control panel detects an alarm
- ALARM TRANSMISSION LED: red LED that lights when all alarm devices have been activated.
- OUT OF USE LED: yellow LED that lights when a device is out of use.
- TEST POSITION LED: yellow LED that lights when one or more items are in the test position.
- SYSTEM FAULT LED: yellow LED that indicates that a fault has been detected in the control panel itself or that the connection between the control panel and the operating panel is broken.
- SILENCE LED: yellow LED that lights when the alarm devices have stopped.
- KEYBOARD ON LED: yellow LED next to the control key that lights when the control key is turned to the correct position. All keys can be operated when this LED is on.

2.2 The display

Every message issued by the control panel is shown on the display.

The LCD display consists of 4 lines, each of which can show 40 characters. The top 3 lines can contain alarm or fault messages. The bottom line is used to show status information.

In the case of fault messages, the latest message is always shown. Data that can no longer be shown on the display are held in the memory and can be retrieved using the Scroll key. The memory can be retrieved again (see Section 5, OPERATION OF KEYS AND MENUS)

Alarm messages take precedence over fault messages. When alarm messages occur, any fault messages on the display will disappear and make way for them. The top line shows the number of alarms present and the second line shows the location of the first one. In the event of multiple alarms, the location of the latest alarm is shown on the third line. The remaining alarms can be called up by using the Alarm Scroll key.

2.3 The keyboard

Every keystroke accepted sounds a beep. A rejected keystroke sounds a double beep.

Four keys on the operating panel are always accessible.

BUZZER STOP



The control panel responds to this key only if the buzzer is sounding. Only the buzzer on the operating panel stops when this key is pressed. The buzzers on all operating panels will stop simultaneously in installations with multiple operating panels.

ALARM SCROLL



This key works only if the control panel is in an alarm condition. It shows alarms chronologically on the display. If there are multiple alarms, the first and last alarms will be shown on the normal display. The Alarm Scroll LED lights if there are three or more alarms, in order to indicate that the alarms that are not visible can be retrieved using the Alarm Scroll key.

LAMP TEST



The LEDs and buzzer on the operating panel can be tested with this key.

LANGUAGE



This key is used to select one of the pre-programmed languages.
The location information entered by the user remains in the original language.

All the other keys can only be used when the control key has been turned to the correct position. Turn the control key so that the yellow LED next to it lights.

RESET



This key resets the control panel. This means that:

- the sirens and other alarm devices are switched off
- the buzzer stops and all LEDs, except for the Power LED, are extinguished
- the display is cleared
- the text Reset appears on the display for a few seconds
- all detectors are reset
- the status of the detectors is deleted, the detectors that are out of use remain out of use, and the detectors in the test position remain in the test position
- any abnormalities after reset are reported.

SILENCE



Pressing this key:

- stops the buzzer on the operating panel
- stops the sirens and lights the Silence LED
- stops the Operator Reaction Time and starts the InspectionWalk Time
- stops the InspectionWalk Time and puts the control panel in monitor status (see Section 4, General operation of delay times)

DAY/NIGHT



This key is used to switch between day and night schemes.

- If the display shows Directmode:yes, then the delay times are not running and an alarm will operate all alarm devices immediately. (night scheme)
- If the display shows Directmode:no, then the delay times are running and an alarm will operate the sirens after a delay (day scheme) (see Section 4, General operation of delay times)

See Section 5, OPERATION OF KEYS AND MENUS, for a full description of all keys.

Note:

The keyboard can feel warm during normal operation. This is absolutely normal, because all the heat is deliberately dissipated through the front of the panel.

2.4 The label pocket

The label in the label pocket can be changed, for example for indications in another language. Consult your dealer.

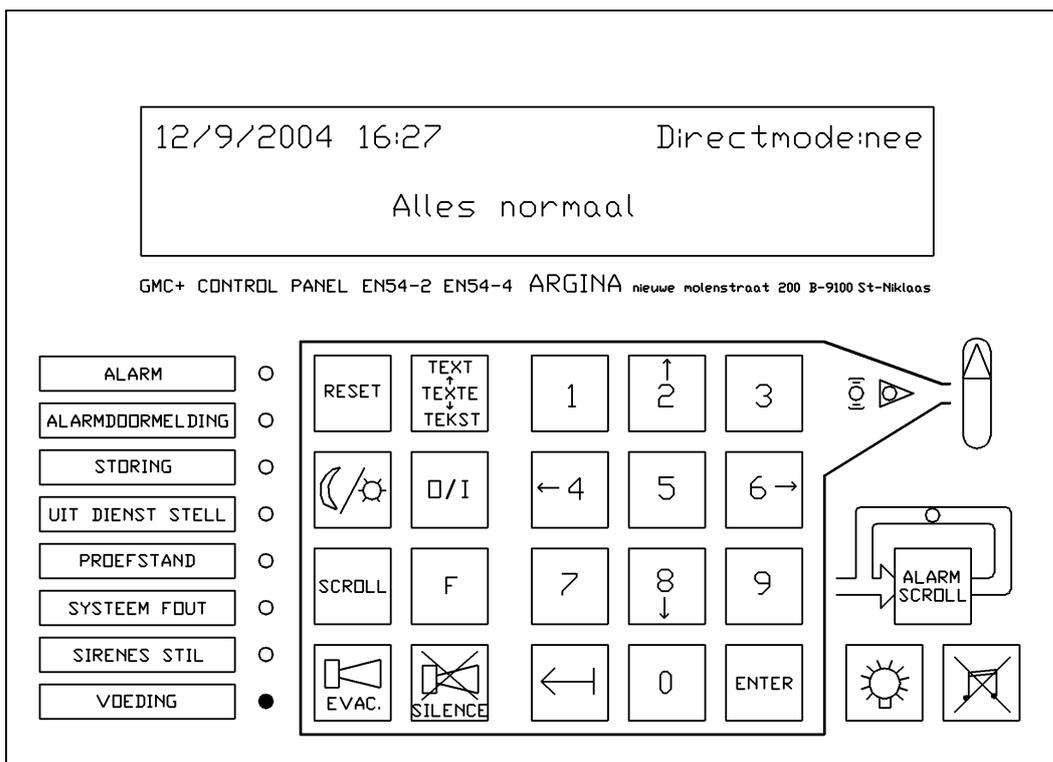
Sample pocket labels:

FIRE ALARM
ALARM TRANSMIT.
FAULT
OUT OF USE
TEST POSITION
SYSTEM FAULT
SILENCE
POWER

ALARM
ALARMDOORMELD.
STORING
UIT DIENST
PROEFSTAND
SYSTEEM FOUT
SIRENES STIL
VOEDING

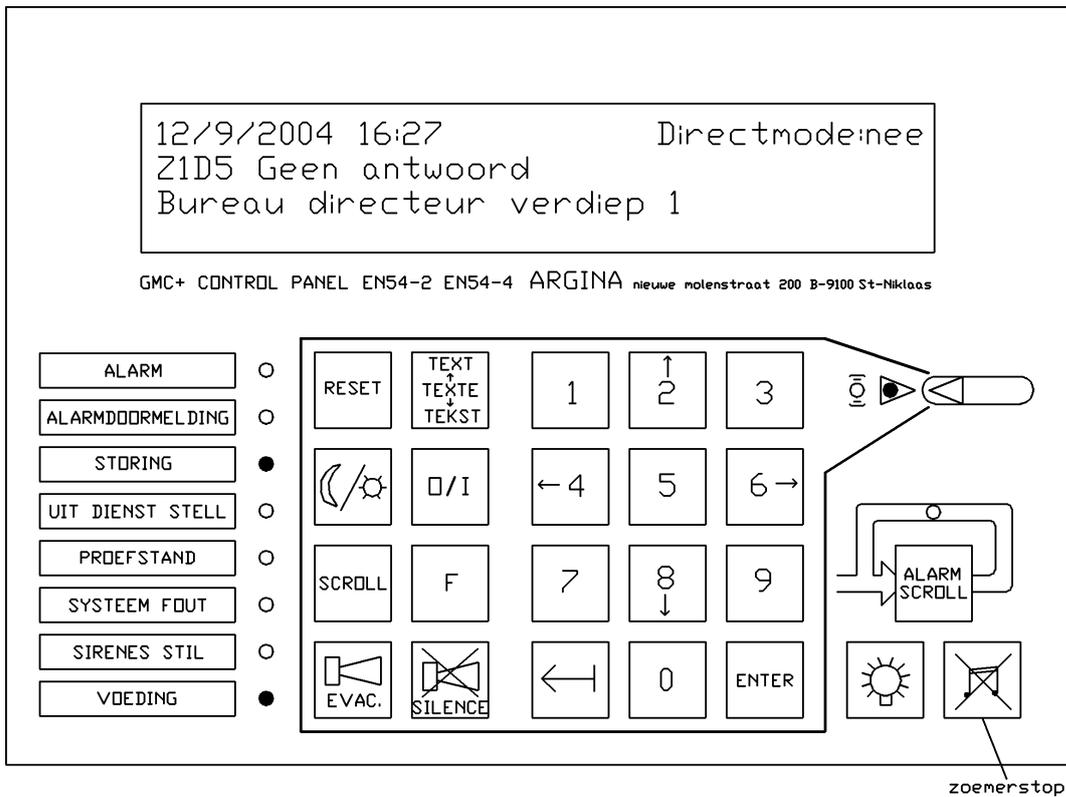
3 MESSAGE ACTIONS

3.1 Normal condition



Normally only the green Power LED will be lit. The top row of the display shows the date and time, together with the day/night operating scheme. (Directmode:no or Directmode:yes)

3.2 Fault message



In the event of a fault the Fault LED lights and the control panel buzzer sounds a continuous tone. The buzzer can be switched off immediately by pressing the Buzzer Stop key, enabling the message to be examined in peace.

The fault message is shown on the second and third lines of the display: the second line shows the fault and the element and the third line the pre-programmed text for the element. The top row of the display shows the current date and time, together with the day/night operating scheme.

The various fault messages and their possible causes can be found in the table below. The text on the display is shown against a grey background.

FAULT TABLE	
Mains fault C1	The mains power to Control Panel 1 has failed. The control panel has switched to batteries automatically.
Battery fault C1	The batteries for Control Panel 1 have been found to be in poor condition (or they have been disconnected).
Earth fault C1	There is a leakage current to earth at the location indicated. Possible cause: one of the cables is making contact with earth (for example with a metal cable duct, the control panel casing, etc.).
Z1 D5 No answer	Detector number 5 in Zone 1 has come loose from its base or the line in Zone 1 is open before Detector 5.
No network answer NetNo 2	Unit number 2 in the ArgNet has dropped out. This could be, for example, an operating panel or an ArgNet-PC interface.
Wrong network device NetNo 1	The control panel expects a different ArgNet device at this network number. The set-up will probably have to be corrected using the ConfigMC program.
Z1 D5 Wrong type (TVC v1)	The control panel expects a different type of detector at this location. It sees a thermal detector (TVC v1) instead of an optical one, for example. The problem can be resolved by installing the correct type of detector or by changing the set-up using the ConfigMC program.
Z1 D5 Double answer	The control panel has detected that there are two encoders that respond with number D5. A second detector has probably been set up incorrectly with number 5.
Z1 D5 Chamber fault	This refers only to non-analogue detectors, solely for backwards compatibility.
Z1 D5 Out of its base	A non-analogue but nevertheless personalised detector has been turned out of its base.
Z1 D5 Out of use	Detector D5 in Zone 1 has been set out of use.
Z1 D5 in test position	Detector D5 in Zone 1 has been set in the test position.
One or more items out of use	One or more items are out of use. These elements can be called up using the Scroll key.
One or more items in test position	One or more items are in the test position. These elements can be called up using the Scroll key.
Z1 D9 Short circuit	Press Scroll for more messages

A short circuit has been detected in part of the loop. The control panel will isolate that part and issue the message 'No answer' to indicate which detectors are out of use.

Short circuit in outward part of Loop 1

Loop 1 has short-circuited. The wiring in the loop should be inspected. The cause could be too heavy a current in the loop concerned.

Short circuit in return part of Loop 1

Loop 1 has short-circuited. The wiring in the loop should be inspected. The cause could be too heavy a current in the loop concerned.

Loop fault Z1 D6

A fault has occurred in the wiring between Master Siren 6 in Zone 1 and its slaves in a loop of intelligent (personalised) sirens.

Power Supply fault Z2 D9

A Power Supply fault is reported on the control panel display when there are input/output modules, intelligent sirens, gas detectors or extinguishing modules installed and they lose local power.

Line open IN1 C1

Input 1 on Control Panel 1 has detected an open line.

Short circuit IN2 C1

Input 2 on Control Panel 1 has detected a short circuit.

Line open guarding 1 C1

Guarding input 1 on Control Panel 1 has detected an open line.

Short circuit guarding 1 C1

Guarding input 1 on Control Panel 1 has detected a short circuit.

Maintenance warning

Maintenance of the fire alarm installation is urgently required. (See Section 6, MAINTENANCE).

Current consumption too high C1

The current consumption of Control Panel 1 is too high. The consumption by external users is probably too high. Consult your dealer.

Fuse F1 faulty C1

Fuse F1 on +24V output 1 is faulty.

Power supply temperature too high C1

The temperature of the power supply for Control Panel 1 has become too high, possibly because current consumption by external users is too high. Consult your dealer.

Temp too high: switch off C1

The temperature of the power supply for Control Panel 1 has become so high that the control panel has decided to switch itself off for reasons of safety. Consult your dealer.

Fault in power supply C1

An irregular voltage has been measured in the power supply of Control Panel 1. Consult your dealer.

Fault in battery charger C1

An irregular voltage has been measured in the battery charger of Control Panel 1. Consult your dealer.

Battery discharged: switch off C1

The battery of Control Panel 1 is discharged and there is no voltage present. The control panel has switched itself off and the batteries have been disconnected.

Control panel has booted C1

The Control panel has booted after complete power failure.

Configuration data corrupt C1

The configuration data (site specific data) was corrupt. The control panel has provisionally restarted with minimal operation. Consult your dealer as soon as possible.

System fault 11,0,1687 C1

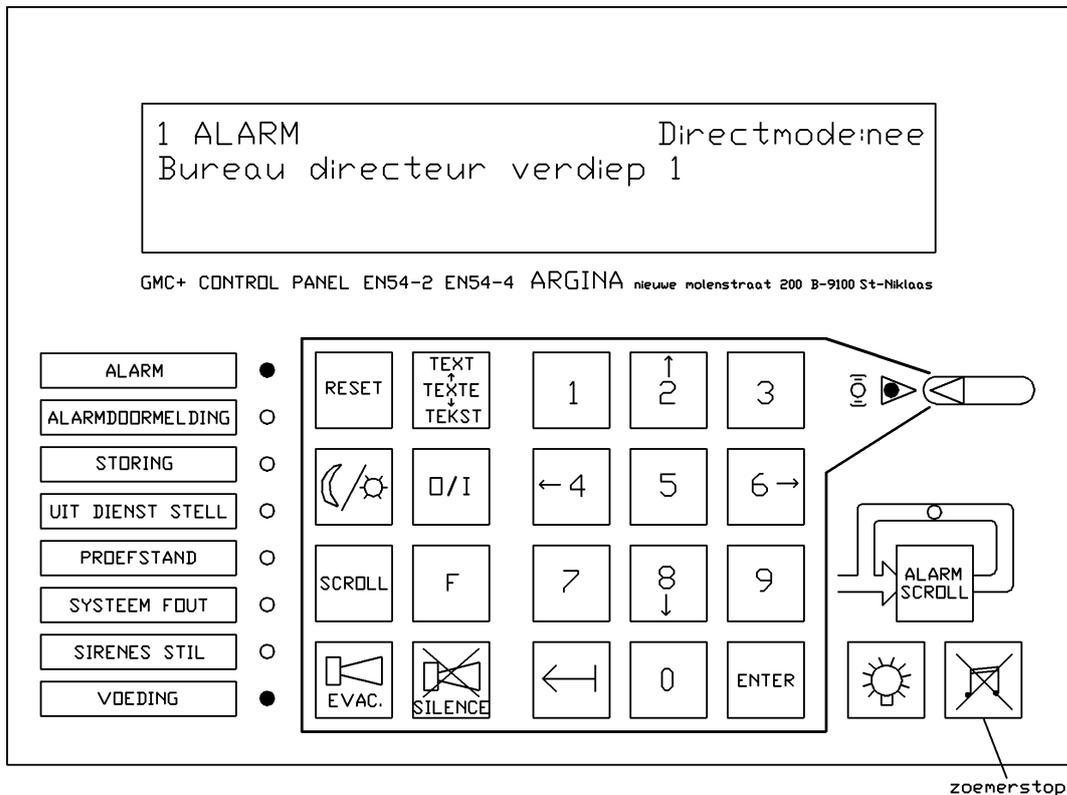
Note the system fault figures and consult your dealer.

If it is known or suspected that the cause of the fault no longer exists, Reset can be used. (see Section 5, OPERATION OF KEYS AND MENUS). If the cause has not gone away, the control panel will show a fault message again within anything from a few seconds to thirty minutes then after a reset, depending on the fault message.

If this happens, the Buzzer Stop key can be used to stop the buzzer from sounding and the fault message can be left on the display. Contact your dealer to have the problem resolved.

It can be desirable for some faults to have the element that caused the fault taken out of use (see Section 5, OPERATION OF KEYS AND MENUS).

3.3 Alarm messages



In the event of an alarm the red Alarm LED lights and the control panel buzzer sounds a continuous tone. The buzzer can be switched off by pressing the Buzzer Stop key.

The following message appears on the display:



'1 ALARM' shows the number of alarm events that are on the control panel at the moment.

'Director's office Floor 1' shows the location. there is an alarm event in the office of the director on the first floor.

If the display shows 'Directmode:yes':

the alarm devices were activated immediately. To stop the alarm devices: turn the control key until the yellow LED next to it lights and then press Silence.

If the display shows 'Directmode:no':

the operator reaction time of... minutes ... seconds is running. If no action is carried out on the operating panel, all alarm devices will be activated after a delay of this length. Turn the control key until the yellow LED next to it lights. Press the Silence key within this initial delay time to start the InspectionWalk time of ... minutes ... seconds. The InspectionWalk time allows time to investigate whether evacuation is necessary.

The following message appears on the display:

1 ALARM	InspectionWalk	Directmode:no
Director's office Floor 1		

If evacuation is necessary it can be signalled by pressing the Evac key on the operating panel or by pressing one of the alarm pushbuttons (which are distributed throughout the building).

If the operating panel is not operated within the InspectionWalk time the alarm devices will be activated automatically.

If evacuation is not necessary, press the Silence key on the operating panel again. The alarm devices will not be activated (if they have been activated they will switch off).

The control panel will now be in a monitoring mode and a choice can be made from the following actions:

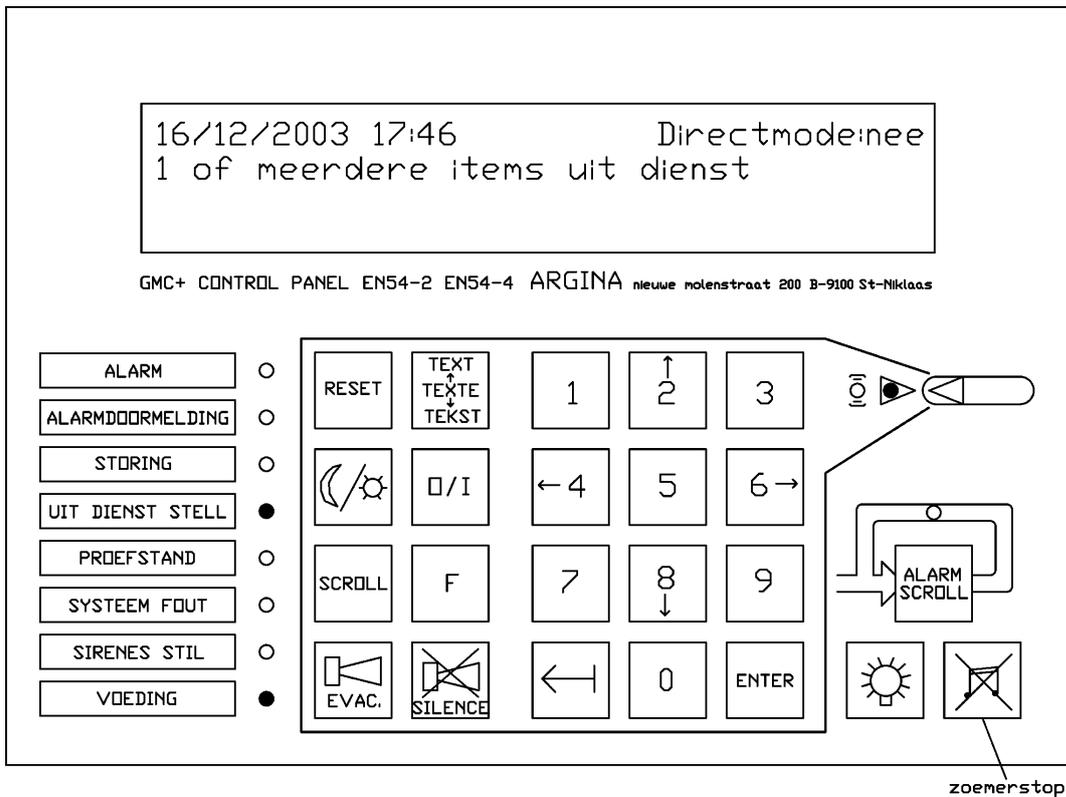
- Do nothing and leave the control panel in monitoring mode. The disadvantage of this is that if a new alarm event occurs, the alarm devices will be activated immediately because the delay times will not be used in this case. Another possible disadvantage is that the door holding magnets remain unpowered in this mode.
- Try a reset. See the description of the Reset key below. This action is indicated if the cause of the alarm (or false alarm) is known and has been resolved. Example: the detector in the kitchen set off the alarm because too much smoke came out of the oven. The Reset key can be pressed without problems after the kitchen has been sufficiently cleared of smoke.
If the Reset key has been pressed more than once and the same detector still indicates an alarm without a discernible reason, there is no point in trying again, and it would be better to try one of the other actions.
- Set the element out of use. See the description of the key below.

Note: if 0 minutes 0 seconds has been set in the system for:

- T1: there is no Operator Response Time. All alarm devices will always be activated immediately in this case. If that is what is actually wanted, it is better to place the control panel in the 'Directmode:yes' operating mode.
- T2: there is no InspectionWalk Time. If in the case of an alarm the Silence key on the operating panel is pressed within the Operator Response Time, the InspectionWalk Time will NOT be started. The message 'InspectionWalk' will then not appear on the display and the Silence LED will light. This means that the alarm devices will no longer be activated automatically as a result of an alarm condition. The fire alarm control panel will be in monitoring mode, however. If a new alarm condition occurs, the control panel will activate all alarm devices immediately.
- T3: the alarm devices will not be switched off automatically. All alarm devices will then continue to operate until they are stopped from the operating panel.

Note: see also Section 4, GENERAL OPERATION OF DELAY TIMES.

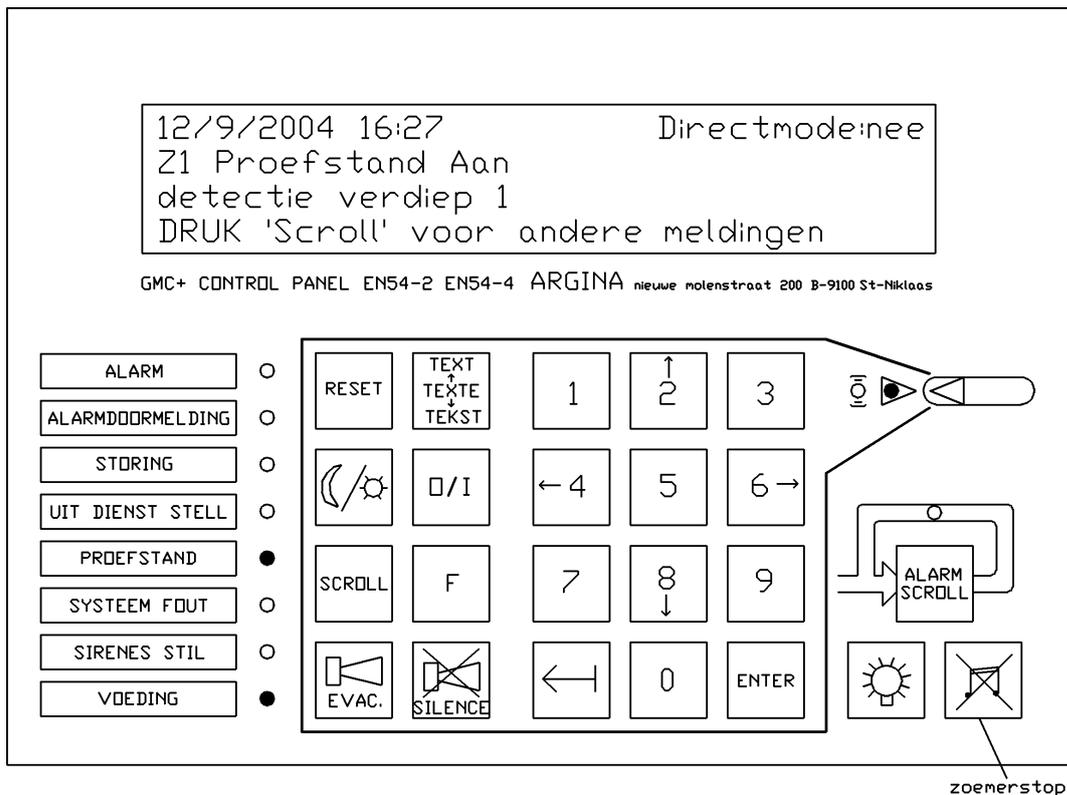
3.4 Out of use message



In the event of one or more elements being set out of use, the Out of Use LED lights and the control panel buzzer sounds a continuous tone. The buzzer can be switched off by pressing the Buzzer Stop key.

See Section 5, OPERATION OF KEYS AND MENUS, for setting elements out of use.

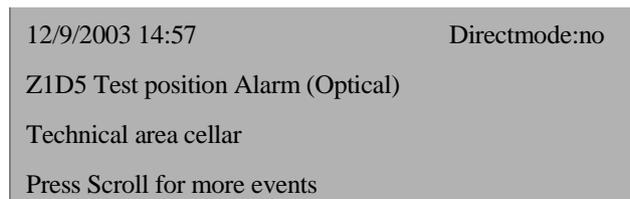
3.5 Test position



The test position function is used to test the proper operation of the detectors and the pushbuttons in a simple way without activating the alarm devices (sirens, etc.).

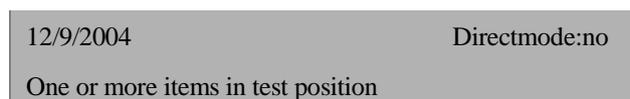
The zones that are in the test position will not issue a genuine alarm. Neither the buzzer nor the sirens will work when an alarm is issued by a zone in the test position.

The detectors that are tested in this way will still show a message on the display, for example:



A detector in the Technical Area cellar is being tested here. The alarm comes from an optical sensor.

If the Reset key is pressed while elements are in the test position, the control panel will be reset and the test position will remain in effect. The buzzer will sound a continuous tone and the following message will appear on the display:



Press Buzzer Stop to stop the sound.

See Section 5, OPERATION OF KEYS AND MENUS, for setting the test position function on and off.

If evacuation is necessary, it can be signalled by pressing the Evac key on the operating panel or by pressing one of the alarm pushbuttons (which are distributed throughout the building).

If the operating panel is not operated within this time (T2), the alarm devices will be activated automatically. The alarm devices will remain activated for the siren operating time, T3 (see time diagram b. operator presses Silence, inspectionwalk starts, the operator does not come back in time and the alarm devices are activated automatically).

If evacuation is found not to be necessary but displaying the alarm events already present on the operating panel (optical messages) is wanted, press the Silence key a second time (see time diagram c. operator presses Silence, InspectionWalk starts, the operator comes back in time). The alarm devices will not be activated and all messages that were on the operating panel will stay there. The fire alarm control panel will be in monitoring mode, however. If a new alarm condition occurs, the control panel will activate all alarm devices immediately.

If evacuation is found not to be necessary because the cause of the alarm is known but has gone away in the meantime, the Reset key on the operating panel can be pressed a second time. The control panel will return to its normal state. If an alarm button is pressed again or a fire detector remains in an alarm state, the control panel will return to the alarm state within a few seconds.

Note: if 0 minutes 0 seconds has been set in the system for:

- T1: there is no Operator Response Time. All alarm devices will always be activated immediately in this case. The control panel operating mode will then still be Directmode:yes.
- T2: there is no InspectionWalk Time. If in the case of an alarm the Silence key on the operating panel is pressed within the Operator Response Time, the InspectionWalk Time will NOT be started. This means that the alarm devices will no longer be activated automatically as a result of an alarm condition. The fire alarm control panel will be in monitoring mode, however. If a new alarm condition occurs, the control panel will activate all alarm devices immediately.
- T3: the alarm devices will not be switched off automatically. All alarm devices will then continue to operate until they are stopped from the operating panel.

Times T1 and T2 can be set to a maximum of 10 minutes, in accordance with EN54-2.

(In order to comply with EN54-2 Item 7.11.d it is necessary to install at least one warning pushbutton that can activate the alarm devices without delay, even if delays are active at the time).

4.2 Control panel operating mode in night scheme: **Directmode:yes**

This operating mode is shown on the display as: Directmode:yes

In this mode the delay times are NOT active and all alarms will operate immediately.

4.3 Changing the day/night operating mode

The operating mode of the control panel can be changed using the Day/Night key. The switchover can also occur at pre-programmed times. Consult your dealer.

5 OPERATION OF KEYS AND MENUS

Every keystroke accepted sounds a beep. A rejected keystroke sounds a double beep.

There are 4 keys that are accessible at all times. All the other keys can only be used when the control key has been turned to the correct position. Turn the control key so that the yellow LED next to it lights.

5.1 Keys for which no control key is required

BUZZER STOP



The control panel responds to this key only if the buzzer is sounding. Only the buzzer on the operating panel stops when this key is pressed. The buzzers on all operating panels will stop simultaneously in installations with multiple operating panels.

ALARM SCROLL



This key works only if the control panel is in an alarm condition. Alarms will be shown chronologically on the display.

If there are multiple alarms, the first and last alarms will be shown on the normal display. The Alarm Scroll LED lights if there are three or more alarms, in order to indicate that the alarms that are not visible can be retrieved using the Alarm Scroll key.

LAMP TEST



The LEDs and buzzer on the operating panel can be tested with this key.

LANGUAGE



The language the control panel uses for messages can be changed at any time by using this key. The locations entered by the user remain in their original language.

5.2 Keys for which the control key must be in the correct position:

The correct position of the control key is that in which the yellow LED next to it lights.

SILENCE



Pressing this key:

- stops the buzzer on the operating panel
- stops the sirens and lights the Silence LED
- stops the Operator Response Time and starts the InspectionWalk Time
- stops the InspectionWalk Time and puts the control panel in monitor status (see Section 4, General operation of delay times)

The Silence key is only used in the case of alarm messages. There is a difference in what this key does according to whether Directmode:yes or Directmode:no is shown at the top right of the display.

If the display shows 'Directmode:no':

When an alarm notification is received, the Operator Response Time of ... minutes .. seconds starts running. If no action is carried out on the operating panel, all alarm devices will be activated after a delay of this length. If the Silence key is pressed within this initial delay time, the InspectionWalk time of ... minutes ... seconds starts running. The InspectionWalk time allows time to investigate whether evacuation is necessary.

The following message appears on the display:

```
1 ALARM   InspectionWalk   Directmode:no
Director's office Floor 1
```

If evacuation is necessary, it can be signalled by pressing the Evac key on the operating panel or by pressing one of the alarm pushbuttons (which are distributed throughout the building).

If the operating panel is not operated within the InspectionWalk time, the alarm devices will be activated automatically.

If evacuation is not necessary, press the Silence key on the operating panel again. The alarm devices will not be activated (if they have been activated they will switch off). The control panel will now be in a monitoring mode and a choice can be made from the following actions:

- Do nothing and leave the control panel in monitoring mode. The disadvantage of this is that if a new alarm event occurs, the alarm devices will be activated immediately because the delay times will not be used in this case. Another possible disadvantage is that the door holding magnets remain unpowered in this mode.
- Try a reset. See the description of the Reset key below. This action is indicated if the cause of the alarm (or false alarm) is known and has been resolved. Example: the detector in the kitchen set off the alarm because too much smoke came out of the oven. The Reset key can be pressed without problems after the kitchen has been sufficiently cleared of smoke.
If the Reset key has been pressed more than once and the same detector still indicates an alarm without a discernible reason, there is no point in trying again, and it would be better to try one of the other actions.
- Set the element out of use. See the description of the key below.

If the display shows Directmode:yes:

When an alarm notification is received, the alarm devices start immediately.

Press the Silence key to stop them. The control panel will now be in monitoring mode and a choice can be made from the three actions above.

RESET



This key resets the control panel. This means that:

- the sirens and other alarm devices are switched off
- the buzzer stops and all LEDs, except for the Power LED, are extinguished
- the display is cleared
- the text 'Reset' appears on the display for a few seconds
- all detectors are reset
- the status of the detectors is deleted, and the detectors that are out of use remain out of use

If it is known or suspected that the cause of a fault or an alarm no longer exists, Reset can be used. If the cause has not gone away, the control panel will show a message again within anything from a few seconds to thirty minutes after a reset, depending on the message.

It can be desirable for some events that the element that originated the event be set out of use. See the description below of O/I (in/out of use).

DAY/NIGHT



This key is used to switch between day and night schemes.

- If the display shows Directmode:yes, then the delay times are not running and an alarm will operate all alarm devices immediately (night scheme).
- If the display shows Directmode:no, then the delay times are running and an alarm will operate the sirens after a delay (day scheme).

See Section 4, General operation of delay times.

The switchover can happen partially or entirely automatically at times and days of the week set up with the ConfiGMC program. Consult your dealer.

It is also possible that pressing the key:

- has no effect
- can only switch from the day scheme to the night scheme
- can only switch from the night scheme to the day scheme

This depends on the settings in the ConfiGMC program.

The Day/Night key has no effect if T1 Operator Response Time has been set to 0 minutes 0 seconds. The control panel operating mode will then still be Directmode:yes.

EVAC (evacuation)



The key can work in two different ways. This is set up using the ConfiGMC program.

First way: for the entire control panel.

Pressing the key activates all alarm devices immediately. The alarm devices can be stopped using the Silence or Reset keys. See the descriptions of the keys above.

Second way: for the evacuation zones.

An evacuation area is a part of the building in which the sirens, flashing lights, etc. operate as a single group. An area is determined in the design of the fire alarm installation in your building.

Pressing the key shows a list from which the area to be evacuated can be selected. It is also possible to evacuate all evacuation areas simultaneously by selecting Total Evacuation from the list.

```
Select the evacuation area with ↑ or ↓ and press Enter
For no evacuation press F
evacuate building A
```

If the evacuation area shown (Building A in the example) is the one to be evacuated, press Enter.
 If the evacuation area shown (Building A in the example) is not the one to be evacuated, press the ↑ key (the 2 key) or the ↓ key (the 8 key) until the desired evacuation area is shown. Press Enter to start the evacuation.
 If more evacuation areas are to be evacuated, press the Evac key again.
 If one or more evacuation areas are evacuated, the general alarm indications will appear and the alarm transmission will also be activated.

If the Evac key is pressed accidentally, the menu can be exited by pressing the F key.

O/I (in/out of use) □/I

This key is used to set elements in and out of use. The way this happens can be selected using the ↑ and ↓ keys (confirm by pressing Enter).

- ‘Set complete control panel in use’ all elements that are out of use are set in use again.
Press Reset to put the control panel in normal mode.
- ‘Set all encoders in fault out of use’ all encoders that are in a fault condition are set out of use.
- ‘Set all encoders in alarm out of use’ all encoders that are in an alarm condition are set out of use.
- ‘View everything, encoders in zone order’
 - select an entire area or individual encoders in order to set them in or out of use. (The encoders are shown in zone order)
 - set all sirens, alarm transmission paths, extinguishing systems and fault transmission paths in or out of service
- ‘View everything, encoders in loop order’ set elements in or out of use in the same way as ‘Scroll everything, encoders in zone order’. The encoders are shown in loop order, however.

If the function ‘View everything, encoders in zone order’ is selected, the first zone in the system will be shown on the display.

```
In/Out of use, encoders in zone order
C1Z1 ‘**’
Zone 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

- ‘C1Z1’ indicates the zone: Control panel 1 Zone 1
- ‘**’ indicates the current status. The following status abbreviations are used:

blank	Normal condition
Alarm	Alarm
TstPosAL	Test position alarm
Evac	Evacuation
Fault	Fault
SysFlt	System fault

OutUse	Out of use
FullOutUse	Fully out of use
Test position	Test position

Note: Multiple abbreviations are possible, depending on the current status.

- 'Zone 1' is the zone text

The ↑ and ↓ keys can be used to scroll through all the zones.

The O/I key can be used to set the selected zone (here it is Zone 1) out of use. The following message will then appear on the display:

```
In/Out of use, encoders in zone order
C1Z1 FullOutUse
Zone 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

To set an item that has been set out of use in use again, press the O/I key after selecting the item. In our example the following message will then appear on the display:

```
In/Out of use, encoders in zone order
C1Z1
Zone 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

The encoders in the zones can be viewed using the Enter key.

```
In/Out of use, encoders in zone order
C1L1Z1D5
Director's office Floor 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

The ↑ and ↓ keys can be used to scroll through all the encoders.
Pressing the F key exits the O/I (in/out of use) function.
The ← key can be used to return to all the zones.

The O/I key can be used to set the selected encoder (here it is detector Z1D5 Director's office Floor 1) out of use. The following message will then appear on the display:

```
In/Out of use, encoders in zone order
C1L1Z1D5 OutUse
Director's office Floor 1
Scroll:↑or ↓ Out of use:O/I Main menu:F
```

More detailed information appears when the Enter key is pressed again:

```
In/Out of use, encoders in zone order
C1L1Z1D5 Out of use
Director's office Floor 1
Scroll:↑or ↓ Out of use:O/I Main menu:F
```

The ↑ and ↓ keys can be used to scroll through all the encoders (with detailed information). Pressing the F key exits the O/I (in/out of use) function. The ← key takes the user one level back.

The ↑ and ↓ keys can be used to scroll through the zones. There are three further internal element groups that can be scrolled through:

- All sirens
- Alarm transmission path
- Fault transmission path

The O/I key can be used to set these internal groups in and out of service once they have been selected. For example, to set the alarm transmission path out of use, press the ↑ key until the following message appears on the operating panel display:

```
In/Out of use, encoders in zone order
In use
Alarm transmission path
Scroll:↑or ↓ Out of use:O/I Main menu:F
```

The O/I key is used to set the alarm transmission path out of use, and the following message will then appear on the display:

```
In/Out of use, encoders in zone order
Out of use
Alarm transmission path
Scroll:↑or ↓ Out of use:O/I Main menu:F
```

Pressing the F key exits the O/I (in/out of use) function.

F (functions)



This key is used to access the following functions:

- Adjust clock
- Show alarm counter
- Set test position
- Control panel identification
- LED flash mode, buzzer mute
- Set delay times
- Reboot the control panel

The following appears when the F key is pressed:

```
Select the desired function with ↑ or ↓ and press Enter
Function: Adjust clock
(Back to main screen: press F key)
```

If the function shown is not there one wanted, press Enter. If a different function is wanted, press the ↑ key (the 2 key) or the ↓ key (the 8 key) until the desired function is shown. Press Enter to go to the function.

The ←| key is a backspace key. Pressing this deletes the previous digit.

Press F to exit the function.

Some functions alter the operating mode of the control panel and are protected by a code. 'Enter your code' appears on the display when one of these functions is invoked. Consult your dealer.

F Adjust clock

```
Enter date and time:
12/9/2004 16:27:45
Correct with ←| key, input with number keys,
confirm with Enter
```

First enter the day of the month. Example: For the twelfth, press 1 then 2, followed by Enter. If 122 is pressed by accident, it can be corrected by pressing the ←| key once. If 13 is pressed by accident and Enter has been pressed, correction is no longer possible. The F key should be pressed to return to the main menu, then once more to select the Adjust clock function again.

Next enter the month number. For example, for September press 9 then Enter.

Next enter the year number, for example 2004, followed by Enter.

Next enter the hour, for example 16, followed by Enter.

Next enter the minutes, for example 27, followed by Enter.

Next enter the seconds, for example 45, followed by Enter.

F Show alarm counter

The alarm counter shows the number of times the control panel has entered an alarm condition. The alarm counter is not incremented by an alarm in a zone in the test position.

F Set test position

The 'test position' function is used to test the proper operation of the detectors and the pushbuttons in a simple way without activating the alarm devices (sirens, etc.).

Caution The zones that are in the test position will not issue a genuine alarm. Neither the buzzer nor the sirens will work when an alarm is issued by a zone in the test position.

If the 'test position' function has been selected, a code has to be entered and the following screen will appear:

```
Set Test position On/Off Select the desired item with ↑ or
↓ and press Enter
Remove all test positions
(Back to main screen: press F key)
```

The 'Remove all test positions' function takes all zones that are in the test position out of it.

To put a zone in the test position, press the ↑ key (the 2 key) or the ↓ key (the 8 key). Select the 'Change test positions per zone' function and press Enter. The following screen will appear:

```
Set test position On/Off
Z1 Test position Off
Zone 1
Scroll: ↑↓ Test position:O/I Main menu:F
```

The second line shows that Zone 1 is currently in the test position.

For example, if Zone 3 is to be put in the test position press the ↑ key twice.

The second line will then show: Z3 Test position Off.

Next press the O/I key to put Zone 3 in the test position: Z3 Test position On If this is the only zone to be put in the test position, exit the function by pressing the F key.

The detectors that have been tested in the test position in this way will only show a message on the display, for example:

```
12/9/2003 14:57 Directmode:no
Z3D2 Test position Alarm (Optical)
Technical Area cellar
Press Scroll for other messages
```

A detector in the Technical Area cellar has just been tested. The alarm comes from an optical sensor. The detector's alarm LEDs will also light. They will be extinguished ten seconds after the detector's sensor level has fallen below the alarm level. Personalised detectors will stay in the alarm condition until Reset is pressed.

To take Zone 3 out of the test position, select the test position function again. Next press the ↑ key twice, and the first line of the display will then show: Test position On zone Z3

Next press Enter, and the first line of the display will change to: Test position Off Zone Z3 If this is the only zone to be taken out of the test position, exit the function by pressing the F key.

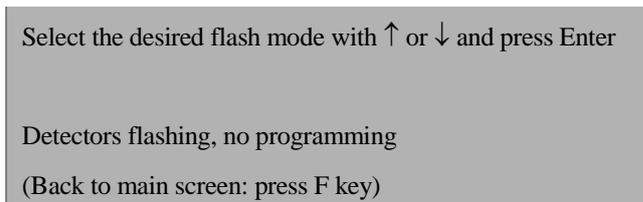
Control panel identification

This function shows the identification text and the serial number on the display.

LED flash mode, buzzer mute

This function puts the IOT detectors, pushbuttons and short circuit isolators in a special service mode in which the encoders' red LEDs begin to flash. Only once the LEDs are flashing can the LaserBox be used to read and program the detectors locally.

If the 'LED flash mode, buzzer mute' function is selected, the following screen will appear:



Select the desired flash mode with ↑ or ↓ and press Enter

Detectors flashing, no programming

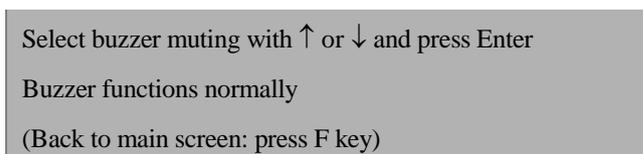
(Back to main screen: press F key)

The desired flash mode can now be selected with the ↑ key (the 2 key) or the ↓ key (the 8 key).

- Flash on detectors, no programming:
The LaserBox can now only be used to retrieve data such as the encoder number and to simulate an alarm condition, but not to change the encoder number.
- Flash on detectors, programming
In this mode the LaserBox can be used to retrieve data as well as to program or reprogram detector numbers. This function is protected by a code number.
- No flash on detectors normal operating mode.

The control panel will automatically exit the flash mode after 2 hours. The flash mode can be exited manually, of course, by selecting 'No flash on detectors'.

The buzzer operation can be set after one of these modes has been selected.



Select buzzer muting with ↑ or ↓ and press Enter

Buzzer functions normally

(Back to main screen: press F key)

The following selection can be made using the ↑ key (the 2 key) or the ↓ key (the 8 key).

- The buzzer will be off temporarily.
The buzzer can be put in a special service mode with this function, so that work on the fire alarm system can be carried out without it sounding. Neither an alarm nor a fault will sound the buzzer. The buzzer will only sound a short beep when a keystroke is made, to show that it has been accepted. The buzzer will revert to normal operation after 2 hours. The buzzer can be returned to normal operation, of course, by selecting the 'Buzzer functions normally' function.
- The buzzer functions normally:
The buzzer sounds a short beep when a keystroke is made, to show that it has been accepted. A rejected keystroke sounds a double beep.
The buzzer sounds a continuous tone in the event of an alarm.
The buzzer sounds an intermittent tone in the event of a fault or out of use..
EN54-2 requires normal operation of the buzzer.

Set delay times

The three general delay times can be set with this function. These are designated T1, T2 and T3.

T1: operator response time ... minutes ... seconds

T2: inspectionwalk time ... minutes ... seconds

T3: siren operating time ... minutes ... seconds

You can fill in the times set up above and in Sections 3.3 and 5 so that you can find them immediately in your user manual in the event of an alarm.

These delay times have a function only in the Directmode:no operating mode of the control panel (day scheme). See Section 4, General operation of delay times.

Caution The necessary care must be taken when using this function because it can affect the proper operation of the control panel.

This function is protected by a code number.

If the 'Set delay times' function is selected, the following screen will appear, for example:

```
Delay times: (min:sec)
T1= 3:0 T2=5:0 T3=0:0
Correct with ←| key, input with number keys,
confirm with Enter
```

Note: the value of T1 and T2 is limited to 9 minutes 59 seconds.

To change the delay times, first enter the minutes value of T1: Example: for three press the 3 key, followed by Enter. If 33 is pressed by accident, it can be corrected by pressing the ←| key once. If 7 is pressed by accident and Enter has been pressed, correction is no longer possible. The F key should be pressed to return to the main menu, then once more to select the 'Set delay times' function again. Enter the correct value and press Enter.

Next enter the seconds value. For example, for thirty press 3, then 0, then Enter.

Next enter the minutes for T2, for example 5, followed by Enter.

Next enter the seconds for T2, for example 0, followed by Enter.

Next enter the minutes value for T3, for example 9, followed by Enter.

Next enter the seconds value for T3, for example 59, followed by Enter.

Note: if 0 minutes 0 seconds has been set in the system for:

- T1: there is no Operator Response Time. All alarm devices will always be activated immediately in this case. If that is what is actually wanted, it is better to place the control panel in the 'Directmode:yes' operating mode.
- T2: there is no InspectionWalk Time. If in the case of an alarm the Silence key on the operating panel is pressed within the Operator Response Time, the InspectionWalk Time will NOT be started. This means that the alarm devices will no longer be activated automatically as a result of an alarm condition. The fire alarm control panel will be in monitoring mode, however. If a new alarm condition occurs, the control panel will activate all alarm devices immediately.
- T3: the alarm devices will not be switched off automatically. All alarm devices will then continue to operate until they are stopped from the operating panel.

Reboot the control panel

The control panel can be rebooted using this function. This is necessary only in the most exceptional circumstances. Consult your dealer in the event of problems. If the F key is protected by a code number, the correct code must be entered (followed by Enter).

SCROLL



The control panel holds a history of 200 messages and events. All current messages that are now present on the control panel but are not displayed individually because of the limited space on the display are in addition to these. These messages can be retrieved by using the Scroll key.

This can be done in various ways. After the Scroll key has been pressed, one of the following methods can be selected using the ↑ and ↓ keys.

- Events starting from the most recent event: selecting this function retrieves the events from the control panel memory chronologically. The ↓ key is used to show the older events, and the ↑ key the more recent.
- Events starting from the last reset: this function reads the memory chronologically from the last reset. The ↓ key is used to show the older events, and the ↑ key the more recent.
- Everything on the system, Detectors in Loop order: shows all alarm and fault messages present. Messages from detection points are shown in Loop order.
- Everything on the system, Detectors in Zone order: shows all alarm and fault messages present. Messages from detection points are shown in Zone order.

The first two methods shown are clear enough to be useful for a user.

The other two scrolling methods can display relatively complicated messages and are mainly intended for technical personnel.

- If 'Everything on the system, encoders in Zone order:' is selected, then during a fault event for detector Z1D5, for example, the following will appear on the display:

```
Scroll everything, encoders in zone order
C1Z1 Fault
Zone 1
Scroll:↑or ↓ Out of use:O/I Main menu:F
```

- 'C1Z1' indicates the zone with the fault (Control panel 1 Zone1)
- 'Fault' shows the status. The following status abbreviations are used:

blank	Normal condition
Alarm	Alarm
TstPosAL	Test position alarm
Evac	Evacuation
Fault	Fault
SysFlt	System fault
OutUse	Out of use
FullOutUse	Fully out of use
Test position	Test position

Note: multiple abbreviations are possible, depending on the status.

- 'Zone 1' is the zone text

The ↑ and ↓ keys can be used to scroll through all the zones with alarm and fault events.

The Scroll function can be exited by pressing the F key.

The O/I key can be used to set the selected zone (here it is Zone 1) out of use. The following message will then appear on the display:

```
Scroll everything, encoders in zone order
C1Z1 FullOutUse
Zone 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

To set an item that has been set out of use in use again, press the O/I key after selecting the item. In our example the following message will then appear on the display:

```
Scroll everything, encoders in zone order
C1Z1
Zone 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

The alarm and fault messages can be viewed using the Enter key.

```
Scroll everything, encoders in zone order
C1L1Z1D5 Fault
Director's office Floor 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

The ↑ and ↓ keys can be used to scroll through all the encoders with alarm and fault messages.

The Scroll function can be exited by pressing the F key.

The ← key can be used to return to the zones.

The O/I key can be used to set the selected item (here it is detector Z1D5 Director's office Floor 1) out of use. The following message will then appear on the display:

```
Scroll everything, encoders in zone order
C1L1Z1D5 Fault OutUse
Director's office Floor 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

More detailed information appears when the Enter key is pressed again:

```
Scroll everything, encoders in zone order
C1L1Z1D5 No answer
Director's office Floor 1
Scroll:↑or↓ Out of use:O/I Main menu:F
```

The ↑ and ↓ keys can be used to scroll through all the encoders with alarm and fault events (with detailed information).

Scroll everything, encoders in zone order
C1L1Z1D5 Out of use
Director's office Floor 1
Scroll:↑or↓ Out of use:O/I Main menu:F

The Scroll function can be exited by pressing the F key.

The ←| key can be used to return to the detector level.

- The 'Everything on the system, encoders in Loop order' mode shows all alarm and fault messages present in the same way. Messages from the encoders are shown in Loop order, however.

6 MAINTENANCE

Cleaning the control panel:

Only the keyboard may be cleaned with a slightly damp cloth. Ensure that no water or cleaning products get into the control key slot or the buzzer opening (between the 3 key and the control key).

Annual maintenance:

Your fire alarm installation should be inspected at least once a year. Its maintenance can only be carried out by specialist technicians who are authorised to work with the ConfigMC program.

Maintenance will include, for example:

- Testing the detectors and sirens
- Checking the condition and date stamps of the batteries
- Inspecting and tightening the connections for 240VAC and earthing
- Retrieving the internal maintenance warnings in connection with the stability and contamination of the detectors and taking the necessary action
- Retrieving and inspecting the control panel log

Argina can provide you with a maintenance contract, so that your installation will remain in optimal condition, thus enabling you to continue to comply with all standards.

7 TECHNICAL DATA

1134-CPD-071 Type: GMC+ Brand: Argina Anthonis De Jonghestraat 50 B9100 Sint-Niklaas

see also Technische fiche GMC+ V1.0 @ www.argina.com

yr: 2010

EN54-2:1997/A1:2006 EN54-4:1997/A1:2002/A2:2006 Control & indicating equipment for fire detection and fire alarm systems for buildings, with integrated power supply.

Optional functions present:

Fire alarm device output (7.8)

Fire alarm routing equipment output (7.9.1)

Automatic fire protection equipment (7.10.1)

Delay of the actioning of outputs (7.11)

Recording of the numbers of entries into fire alarm condition (7.13)

Total loss of power supply (8.4)

Fault warning routing equipment (8.9)

Disabling of each address point (9.5)

Test condition (10)

Standardised I/O interface (11)

