



# Fire Alarm Control Panel IQ8Control C/M



**Operation Instruction** 

798950.10.GB0 04.2015 / AA

#### Intended purpose

This product must only be used for the applications outlined in the catalogue and the technical description and in combination with external components and systems, which have been approved or recommended by Esser by Honeywell.

#### Warning

In order to ensure correct and safe operation of the product, all guidelines concerning its transport, storage, installation, and mounting must be observed. This includes the necessary care in operating the product.

#### Safety-relevant user information

This manual includes all information required for the proper use of the products described.

The term 'qualified personnel' in the context of the safety information included in this manual or on the product itself designates:

- project engineers who are familiar with the safety guidelines concerning fire alarm and extinguishing systems.
- trained service engineers who are familiar with the components of fire alarm and extinguishing systems and the information on their operation as included in this manual.
- trained installation or service personnel with the necessary qualification for carrying out repairs on fire alarm and extinguishing systems or who are authorised to operate, ground and label electrical circuits and/or safety equipment/systems.

#### Safety warnings

The following information is given in the interest of your personal safety and to prevent damage to the product described in this manual and all equipment connected to it.

Safety information and warnings for the prevention of dangers putting at risk the life and health of user and maintenance personnel as well as causing damage to the equipment itself are marked by the following pictograms. Within the context of this manual, these pictograms have the following meanings:



#### Warning sign

Designates risks for man and/or machine. Non-compliance will create risks to man and/or machine. The level of risk is indicated by the word of warning:



Important information on a topic or a procedure and other important information!



Observe configuration and commissioning information in accordance to the national and local requirements.

#### Dismantling



In accordance with Directive 2002/96/EG (WEEE), after being dismantled, electrical and electronic equipment is taken back by the manufacturer for proper disposal.

### **Table of Contents**

1	Ge	General / Application				
2	Ge	neral View – Operating panel front	5			
	2.1	Access levels	6			
	2.2	Key switch / enabling operation	7			
	2.3	Function of the display and operating elements	8			
	2.2	Operating panel with FBA – Switzerland CH (Part No. 786207)	17			
3	Ор	erating status of the fire alarm control panel	19			
	3.1	Normal condition	19			
	3.2	Fire	19			
	3.3	Trouble	20			
	3.4	CPU failure	20			
	3.5	Disconnection	21			
	3.6	Testmode	21			
4	Ор	eration	22			
	4.1	Function keys / selection menu	22			
	4.1	.1 Display / display control	24			
	4.1	.2 Additional common displays	24			
	4.1	.4 Info text / additional text and parameter display	20			
	4.2	Entering time/date	28			
	4.3	Zones	29			
	4.3	8.1 Switching on / resetting a zone	29			
	4.3	3.2 Disconnect a zone	30			
	4.5		31 32			
	4.4	.1 Switching on / resetting a detector	32			
	4.4	.2 Disconnect a detector	33			
	4.4	.3 Status of a detector	34			
	4.5	Controls	35			
	4.0	2 Disconnect a control	36			
	4.5	3.3 Status of a control	37			
	4.6	Common display of the status messages	38			
	4.6	Delay times for activations	38			
	4.7	. Delay and verify	39 40			
	4.8	Alarm counter	41			
	4.9	Lamp test	41			
5	Se	rvice Level	42			
	5.1	Sensor functions (loop)	43			
	5.2	Sensor functions (zone/detector)	45			
	5.3	Primary loop functions (Access levels 3 and 4)	46			

## 1 General / Application

Thank you for buying a product from Esser by Honeywell.

The quality and reliability of Esser products are well known and ensure the highest level of safety at their installation location for many, many years. This user manual in combination with the instructions provided by your installer will quickly provide you with extensive information about the operation of the IQ8Control C/M fire alarm control panel. We recommend that you read this user manual thoroughly and keep it together with the technical documentation of the fire alarm control panel (FACP). If you have any questions, please contact your installer.

To equip buildings, facilities, commonly frequented areas and working spaces with a fire warning system can only be carried out economically and with reasonable propriety when correspondingly well-founded safety concepts are developed and accordingly applied.

Wherever the highest requirements are made on a fire warning system, whether in small commercial facilities or in industrial plants, the Fire Alarm Control Panel IQ8Control transforms safety techniques and economy into practical reality. The modular design with different micro modules and individual extension concepts allow the FACP IQ8Control to be easily adapted to special requirements.

The FACP IQ8Control represents the most modern standard of fire warning technology. A reliable fire warning facility is guaranteed by the application of "intelligent" fire detectors connected in an loop, which is tolerant to short and open circuits.

In this loop - the esserbus<sup>®</sup> / esserbus<sup>®</sup> PLus - up to 127 loop devices each capable of being configured into 127 individual zones can be connected with an overall cable length of up to 3,5 kilometres. The esserbus<sup>®</sup> is a twowire line supplied and monitored at both ends in ring topology. The FACP IQ8Control automatically registers the wiring of the loop and determines the logical addresses of the individual loop devices. A separate adjustment of the addresses of the individual loop devices is unnecessary. Fire alarm panels with esserbus<sup>®</sup> PLus loop provide the direct connection of addressable notification appliances, e.g. sounder to the loop. There is no need of an auxiliary power for these loop devices.

Subscribers in the esserbus<sup>®</sup> are automatic fire detectors, manual call points and technical alarm modules (TAL) and the specially developed esserbus<sup>®</sup> transponder input/output devices. These esserbus<sup>®</sup> transponders are loop devices with freely programmable inputs and outputs, for example for the activation and monitoring of external devices such as display panels, alarm devices, door closers and other connected equipment.

Using the essernet<sup>®</sup> safety network, 31 ESSER Fire Alarm Control Panel or other subscribers such as display and operating panels or alarm devices can be connected in a homogenous network. Operation, e.g. switching off a zone, is possible from any FACP or operating panel in the essernet<sup>®</sup>. Signals such as alarm, trouble, disconnection or other events are transferred to all subscribers in the essernet<sup>®</sup> and can be accessed from any desired position. Data exchange can, according to the transfer rate, be carried out either with a twisted pair or a LAN cable. The essernet<sup>®</sup> communications protocol guarantees reliable data exchange even if a short or open circuit occurs in the network.



### Additional and updated Informations

The described features, specifications and product related informations in this manual correspond to the date of issue (refer to date on the front page) and may differ due to modifications and/or amended Standards and Regulations of the System design, Installation and Commissioning.

Updated informations and declaration of conformity are available for comparison on the www.esser-systems.com homepage.

esserbus® and essernet® are registered trademarks in Germany.

2 General View – Operating panel front



Fig. 1: General view of the display and operating elements

(1)	Single zone indicator unit (GEA) option
2	Common display FIRE
3	Common display PRE-ALARM
4	LED with label field
5	Common display TROUBLE
6	Common display DISCONNECTION
7	Alphanumeric display
8	Function keys – display
9	Key switch
10	Cursor keys – additional messages / information
(11)	Function keys – general
(12)	Function keys – commands 2
(13)	Keyboard 0 – 9
(14)	Opening for Programming via Serice PC Connector must locked with dummy plug for ESD protection
15	Function keys – commands 1

## 2.1 Access levels

When enabling the operating panel for operation using the key switch and the access code for the relevant access authorisation, it can be operated at four different access levels.

Access level 1	<ul> <li>Housing door closed and key switch locked.</li> <li>Only the buttons &gt;Buzzer off&lt;, &gt;Function key F1&lt; and the Cursor keys for displaying the messages in the display can be used.</li> </ul>
Access level 2	Housing door closed and key switch released.
(Operator)	• In this access level, authorised and trained persons can perform operations and query messages.
Access level 3	Housing door open, key switch released and access code.
(Installer)	• This access level allows operation, detailed status display and configuration of the fire alarm control panel by trained and authorised specialists.
Access level 4	Housing door open, key switch released and service PC connected.
(System configuration)	• For programming of the FACP by service technicians and authorised specialists.

## 2.2 Key switch / enabling operation

The key switch can be used to lock the operating panel keyboard of the fire alarm control panel IQ8Control to prevent unauthorised operation. In normal operating mode, the keyboard should be locked.

### Key switch in vertical position



Fig. 2: Keyboard blocked

- The keyboard is blocked. The key can be removed.
- The keys >Buzzer off<, >Function key F1< and the Cursor keys for displaying messages in the display can still be operated when the keyboard is blocked.

### Key switch in horizontal position



Fig. 3: Keyboard unlocked

- The keyboard is unlocked for the operation of the FACP IQ8Control and other processors interconnected through the essernet<sup>®</sup> or other networks.
- The display menu is activated.
- The common disconnection display may be lit. Depending on the customer data programming, when the keyboard was unlocked, at least one zone, one output or one component of the fire alarm control panel, such as the master box (MB), was switched off.



In case of a fire alarm, FACP will disable the activation of the MB. The fire brigade will not be alarmed, automatically.

- In case of an event, the red LED >Notify fire department< will be lit.
- Call the fire department immediately!
- Enabling of the keypad with the key switch does not prevent activation of a MB or an extinguishing area. A shutdown is only permitted manually in access level 2. (This can be configured using the tools 8000 service and programming software).

## 2.3 Function of the display and operating elements

The operation of the FACP IQ8Control is carried out via the Display- and operation panel. Minor changes of the displayed information are possible are relating to the programming of the panel.



Fig. 4: Operating elements - keypad - display

1	Common displays
2	Display
3	Menu
4	Function key – display
5	Cursor key – other messages / information

All received signals such as fire, trouble or switch-off are shown in the display in alphanumeric form (8 lines, 40 characters per line).

### Keyboard

By means of the key switch, the keyboard is unlocked for operation. With these keys, it is possible to functions such as switching zones and detectors on and off.

### **Function keys**

With the four function keys, the menu options positioned above them in the display are selected. Depending on the current state of the FACP or the operation level, differing menu options are shown in the display.



Fig. 5: Common display fire

The common display >Fire< is activated if at least one fire alarm has been detected. The originating detector or zone will be shown on the display.

Fire alarm !

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 



If evacuation plans or guidelines exist for cases of fire alarm, these plans have to be followed and the premises have to be evacuated, if necessary. Make sure to inform yourself well in advance about existing escape routes and required measures in case of a fire.

An external alarm is triggered.

### Fire (Common display)

Salula/
Fire Fire

Red LED is permanently on

### Fire Releasing System



The fire releasing control equipment has been activated.

The fire and rescue services are alarmed via the connected

master box. If no MB is connected or if this could not be

activated, the LED >Call fire brigade< is also on.

Red LED is permanently on

#### Master box (MB)



The MB is activated and the intervention staff (e.g. fire department) has been alarmed.

Red LED is permanently on

#### Notify fire department



 $\Rightarrow$  The MB has malfunctioned or is switched off and cannot be activated.

### Call the fire department immediately!

Red LED is permanently on



Fig. 6:Common display pre-alarm and LED with label field

A Pre-alarm is signalled when an intelligent fire detector reaches the pre-alarm level or when in a programmed twin-loop/twin detector connection a loop or a detector have detected a fire alarm.

The Pre-alarm is automatically reset if no further signals are transmitted. The common display Pre-alarm is extinguished and any activated alarm devices are switched off. If further alarm signals occur, a fire alarm is automatically initiated and the MB is activated. In case of a pre-alarm, it is important that the detector location and the cause of the alert are verified.

### Pre-Alarm (Common display)



At least one detector or zone is signalling the pre-alarm condition.

Red LED is permanently on

 $\Rightarrow$  The activated detector or the activated zone is indicated on the display.

The internal central buzzer also sounds.

Control actions assigned to this event by means of customer data programming, e.g. relay outputs for activating internal signalling devices or evacuation signals will be executed.



On pre-alarm, the MB for alarming the emergency services will not be activated.



Yellow LED is permanently on

The key >Verify< has activated the function Verify.

The programmed Verify time for the Verify of the cause of the

alarm is running. The MB is only activated after the expiry of the

The function >Delay/Verify< is described in chapter 4.7.

 $\Rightarrow$ 

 $\Rightarrow$ 

### LED with label field ${\rm \textcircled{1}}$

This LED can be assigned a building-specific display function in the customer data program of the FACP. The label field ① and/or supplied label stickers can be used to label this customisable display function.

Verify time.



 $\Rightarrow$  The assigned function is active.

Yellow LED blinks

Alternative programming:



The assigned function is active.

Yellow LED is permanently on

Trouble 4
in Operation
CPU Failure
Power Supply

### Fig. 7: Common display TROUBLE

The common display Trouble is activated if at least one malfunction has been detected. The reason will be shown on the display.

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

### Trouble (Common display)

A component of the fire alarm control panel or a monitored relay output such as an external alarm device or a master box has malfunctioned.

Yellow LED is permanently on

#### Operation



The power supply (battery or mains voltage) is connected. The fire alarm control panel is in an operative condition.

Green LED is permanently on

### **CPU** failure



The fire alarm control panel is only partially operative due to a malfunction of the control panel functions. Display or operation of the control panel is no longer possible (Exception: Key Buzzer off).

Yellow LED is permanently on

The activating of the MB and the LED >Master box (MB)< and >Notify fire department< is still operative in the CPU failure mode of the FACP in the case of a fire alarm.

### **Power supply**



The power supply of the FACP (battery or mains voltage) is out of order.

Yellow LED is permanently on



In cases of malfunction or emergency operation, correct functioning of the Fire Alarm Control Panel is no longer ensured. Inform customer/maintenance service!



Fig. 8: Common display Disconnection

The common display >Disconnection< indicates that at least one output, input, or other component of the FACP has been disconnected. The disconnection will also be shown on the display.

### **Disconnection (common display)**



Yellow LED is permanently on

### **Relay Outputs**



At least one relay output such as an internal control panel relay or the control of an esserbus<sup>®</sup> transponder has been switched off.

At least one input/output e.g. a zone or relay has been switched

Yellow LED is permanently on

Yellow LED blinks

### Master box (MB)

Access level 3:

 $\rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

off.

Activation of the MB is automatically prevented by the opened tamper switch (no deactivation!). In case of an event, <u>no</u> automatic activation takes place. This condition is only changed by closing of the tamper switch (no button function)!

Access level 2:

 $\Rightarrow$  The MB is switched off, e.g. for servicing, by enablement of the keyboard with the key switch.

Yellow LED is permanently on

### Testmode



A component of the FACP (e.g. zone) has been set to Testmode for servicing and maintenance work.

Yellow LED lights



A switched off master box will not transmit an alarm signal in the case of an event! A zone in Testmode will not transmit an alarm in the case of an event.

Fire	Fire
Disconn. / Trouble	Disconn. / Trouble
_	

Fig. 9: Single zone indicator units (GEA)

Optical displays (LED) for a total of 64 zones may be integrated into the FACP IQ8Control. >Fire< is signalled by a red LED. A yellow LED signals malfunctions and disconnections. There is a labelling field for each zone, which can be marked with the name of the zone or of the area monitored by this group of detectors.

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

 $\Rightarrow$ 

Fire



At least one detector and / or one manual call point in the zone is signalling a fire alarm.

Red LED is permanently on



For the zone, which first signalled the fire alarm (initial alarm detection).

Red LED blinks

### **Disconnection / Trouble**

The zone is switched off. Switching zones on/off refer to chapter 4.2.

Yellow LED is permanently on



At least one detector of the zone has malfunctioned. Inform customer/maintenance service!

Yellow LED blinks



Switched off or malfunctioning zones will not transmit an alarm in the case of an event.



#### Panel reset



#### Audible Alarm off / silence



All detected fire alarms, zones, displays and technical alarm signals (TAL alarm) are cancelled and returned to normal condition.

Access level 2 (keyboard release with key) required.

#### Access level 2:

Activated alarm units can be silenced or enabled again by pressing the button (toggle function).

Depending on the programming of the fire alarm control panel, silenced alarm units are automatically activated again upon every new event. The common display >Alarm off< visually indicates if alarms are deactivated.

Alternatively, the connected alarm signalling devices can also be shut off or reactivated (toggle function) in access level 2 by pressing the buttons >Control< and >Function key F4< (sound on or sound off).

This control is possible as of system software V03.10R000 and tools 8000 programming software V01.18.0.

#### Special function in access level 3:

In access level 3, pressing of the button switches the connected alarm units permanently off. They are not reactivated by subsequent events. The common display >Alarm off< also lights up.

When exiting access level 3, this function returns to the initial state  $\triangleq$  access level 2

#### **Disconnect Master Box**



The activating of the main alarm unit / the MB is switched on or off (toggle function). Switch-offs are displayed visually in the Common display disconnection field.



Switched off alarm devices and master boxes will not transmit an alarm in the case of an event. The fire brigade is <u>not</u> notified automatically.

#### Verify



If the >Delay function< is activated, pressing this button during an event starts the investigation time for delayed activation of the master box.

The first and last messages with the highest priority appear in the display again without the need to press any other buttons.

The > Verify < function refer to Chapter 4.7.



Additional messages are shown on the display. They can be selected with the Cursor keys. The first and last messages with the highest priority appear in the display again without the need to press any other buttons.

#### Delay



When this key is pressed, the delay time is enabled/disabled (toggle function).

Refer to chapter 4.7 Delay/Verify.

#### **Buzzer off**



Acknowledgement of the control panel buzzer. This key remains active when the keyboard is locked.

The buzzer is reactivated in the case of a further event.

## 2.2 Operating panel with FBA – Switzerland CB (Part No. 786207)

The panel front with integrated Fire department operating and indicating panel (FBA) is an optional device for use of the Fire Alarm Control Panel IQ8Control in Switzerland.

In accordance to the requirements of the common national Fire assurance companies (VKF- Switzerland) each Fire Alarm Control Panel must be installed at an accessible place for the fire department and must be equipped with the standardised Fire department operating and indicating panel (FBA)



Fig. 10: panel front with integrated Fire department operating and indicating panel (FBA)



Fire department operating and indicating panel (FBA)



Any other operating elements comply with the functionality of the panels standard front in chapter 2.1.

For additional versions of the operation panel front with a built-in Fire Department Notifying and Indication unit refer to the Fire systems catalogue.



## **3** Operating status of the fire alarm control panel

The current operating status of the **IQ8**Control is shown on the operating panel. Six different operating conditions are possible.

## 3.1 Normal condition

The normal condition refers to an operative monitoring state of the control panel unchanged by external influences.

- The green LED >in Operation< lights.
- No further displays or messages.
- The key switch locks the operating panel keyboard.

## 3.2 Fire

- The FACP is in alarm mode, i.e. it is signalling a fire alarm.
- The common display FIRE (red LED) lights.
- The MB has been activated.
- The internal control panel buzzer sounds.
- External alarm devices, e.g. acoustic alarm devices or control panel buzzers are activated.
- The zone, which has detected the fire, is shown in the display with the programmed additional text.
- The red LED of the corresponding zone(s) lights in the single zone indicator units (optional). If several zones signal a fire alarm, the red LED of the zone, which first detected the fire, blinks (initial alarm detection).
- The red LED >Master box (MB)< lights when a MB for automatic transmission of the alarm is connected and the fire department has been informed.
- Possibly, the red LED >Notify fire department< may light. The fire department has not been informed via the MB.

### Call the fire department immediately!

## 3.3 Trouble

The common display TROUBLE (yellow LED) lights and the control panel buzzer sounds intermittently.

- At least one control panel function has failed!
- A message is shown in the display describing the failure/cause.
- The yellow LED of the zone in which the malfunction has possibly occurred blinks on the single zone indicator units (optional).



Zones/relay loops or inputs/outputs will not signal an alarm in the case of an event. Inform customer/maintenance service!

## 3.4 CPU failure

The fire alarm control panel is only partially operative!

- No messages on the display.
- No evaluation of information.
- No activation of external equipment such as alarm sounders.
- The master box and the >Master box (MB)< LED and Notify fire department will be activated even in the FACP CPU failure mode.



A comprehensive operation in a CPU-failure mode (emergency operation) or system fault of the fire alarm control panel is no longer provided. Call customer/maintenance service <u>immediately</u>!

## 3.5 Disconnection

The normal condition of the FACP has been changed by an external influence.

Displays:

- The common display >disconnection< (yellow LED) lights.
- Possibly, a further display in the Common display disconnection field may be signalled, showing which components have been switched off, e.g. >Relay or Master box (MB)<.
- The disconnection is reported in the display as a plaintext message.
- A switched off zone is indicated on the single zone indicator units (optional) by a permanently lighting yellow LED.



Switched off zones, detectors and controls (AE) and other parts of the equipment will not signal an alarm in the case of an event!

### 3.6 Testmode

The yellow LED >Testmode< is permanently on. The >Testmode< mode of the FACP has been activated for service and maintenance purposes:

• The function of detectors/zones is under inspection.



A zone in Testmode will not signal an alarm in the case of an event.

## 4 Operation

The following section describes the most important operating actions for a single FACP IQ8Control. If several processors are connected in a network through the essernet<sup>®</sup>, deviations from this description are possible. In this case, please ask your specialised installer.



The operation of an installed and operative fire alarm control panel may only be carried out by authorised and trained personnel under observance of the safety precautions and, if necessary, in co-operation with the relevant emergency services (e.g. fire department).

## 4.1 Function keys / selection menu



Fig. 11: Function keys / selection menu

### Summary of the various menu options

The selection menu allows direct access to logically grouped menu options. When the keyboard is unlocked, up to four menu options are constantly shown in the display, each of which can be selected using the function key located below it.

Status	$\Rightarrow$	Status display of current messages in order of significance.
Summery	⇒	Group display and number of the various types of message, such as >fire<, >trouble<, >disconnection< etc.
Service	$\Rightarrow$	Transfer to the service level to operate the primary loop functions such as switching primary loops, sensors etc. on/off.

- Installer  $\Rightarrow$  Operating actions for the specialised installer for service and maintenance purposes. (Individual password code required, if a code has been programmed.)
- **Time funct.**  $\Rightarrow$  Entry of time/date and the switching times of the Delay/Verify function.
- **Escape**  $\Rightarrow$  Termination of the current input prompt without storing or executing the function.
- Acknowledge  $\Rightarrow$  Acknowledge the selected menu point/operation.
- **Function**  $\Rightarrow$  Confirmation of the execution of the previously selected function.
- **Rem.Text**  $\Rightarrow$  Query of the additional text display (Remote text) of other FACP's in the essernet<sup>®</sup> network. If an event has been detected by a FACP in the essernet<sup>®</sup>, the additional text from the activated fire alarm control panel can be displayed by the remote text function on another fire alarm control panel.

#### Information and additional text

- Info
- ⇒ Display of any programmed information text relating to the message in the display. If information text exists, i.e. has been programmed for this message, the menu point >Info< is displayed. If info text has not been programmed, the menu point Info is not displayed.</p>
- Param/AT ⇒ Display of the additional text programmed for the current message or a parameter. For a parameter, a works-programmed information text for the current message in the display is shown. It is possible to switch from additional text/parameter display using the function key. If additional text has not been programmed, the menu point >Add. text< is not displayed.



If information or additional text has been programmed for a message, the additional text (Param/AT) is always displayed first. Pushing the function key during the display of the additional text shows the information text.

### 4.1.1 Display / display control



Fig. 12: Example display for a fire alarm incl. detector information (example)

- In all, three fire signals were detected. The display shows the first (1.) and the last signal (in this case 3.) incl. group and detector information respectively. Pressing the cursor key scrolls the display, and the next signal (2.) is displayed.
- ② Time of this alarm message.
- ③ Date of this alarm message.
- Additional text line (the additional text programmed for the triggered zone or detector will be displayed).
- (5) Additional information text or parameter / additional text (Param/AT).

### Significance of the display to "1. Fire" :

- First fire signal on 28.07 at 15:10 hours.
- The detector No. 02 in the zone No. 02 signals Fire.
- The additional text programmed for this zone >Office 1 Room 17 1st floor< provides information on the location
  of the fire.</li>
- The display field >Info< shows that an information text has been programmed for this zone, which can be accessed by pressing the corresponding function key.

### 4.1.2 Additional common displays

The additional display line of the FACP IQ8Control shows additional common displays (0, 1, 2, !, -).





### Fig. 13: Additional common displays

6	Acoust.	Acuostic
$\bigcirc$	MB	Master box (MB)
8	BSE	fire protection equipment
9	Revi.	Revision



Fig. 14: Cursor keys

### Further Displays / Messages

For your information, the following additional messages (if existing) are shown in the display:

MB disconnected	$\Rightarrow$	When the activation of at least one MB for the warning of the fire department has been switched off, e.g. by enablement of the keyboard.
MB trouble	$\Rightarrow$	When at least one MB has malfunctioned.
Acoustic trouble	⇒	When at least one acoustic alarm device has malfunctioned.
Acoustic disconnected.	⇒	When at least one acoustic alarm device has been disconnected.
Revision active	$\Rightarrow$	When the fire alarm control panel has been switched to revision on the fire department operating panel.

### 4.1.3 Display priority of the messages in the display

### **Display priority**

The first and last messages with the highest current priority are shown in the display of the FACP IQ8Control respectively. If several messages with equal priority are imminent, these can be queried by pressing the Cursor keys.

In priority level 1, only groups with a fire message are displayed for increased clarity.

The corresponding detectors (FIRE-D) are displayed in priority level 2 messages.

Priority stage	Condition	Display
1	Fire alarm (zone)	FIRE
2	Fire (fire detector details)	FIRE Det
3	Fire loop	FIRE
4	Technical alarm	T-ALARM
5	Pre-alarm	PRE ALARM
6	Trouble	TROUBLE
7	Trouble loop	LINE TROUBLE
8	Transfer route switched on (loop)	LINE ON
9	System trouble	SYS TROUBLE
10	Disconnection	DISCONNECTION
11	Disconnection loop	LINE OFF
12	Trouble relay output	TROUBLE
13	Switch-off relay output	O/P OFF
14	Activate	ACTIVATE
15	Testmode	TEST



If the FACP is operated during the display, the corresponding function is carried out. The message with the highest priority reappears in the display automatically without the need to press any additional buttons.



	1. FIRE Det Zone : 002 Det : 0215:10 28:07	2
1	Access via stairway right Inform Mr. J. Smith (Tel. 02137 / 99152)	
	Status Param/*T	

Fig. 15: Info text display (example)

- ① Info Display of any programmed information text relating to the message in the display. If information text exists, i.e. has been programmed for this message, the menu point Info is displayed. If >Info< text has not been programmed, the menu point >Info< is not displayed.
- ② Param/AT Display of the additional text programmed for the current message or a parameter. For a parameter, a works-programmed information text for the current message in the display is shown. It is possible to switch between additional text/parameter display using the function key. If additional text has not been programmed, the menu point >Add. Text< is not displayed.</p>

If >information or additional text <u>and</u> a parameter< have been programmed for a message, the information and additional text is always displayed first. Pushing the Param./AT function key during the display of the additional text shows the parameter.

### Example of an info text display (Fig. 14)

Access to programmed information text for this message programmed in the customer data and related to the zones (max. 4 lines / 40 characters per line) can be attained by pressing the function key Info. In this example, the following two-line info text was programmed for zone 02 in a fire condition:

Access via stairway right! Inform Mr. J. Smith (Tel. 02137/ 99152)

Info text / additional text and parameter display



Pressing the Condition function key >returns< the panel to the condition display. The display switches automatically to the preceding menu point without the need to press any additional buttons.

## 4.2 Entering time/date

Time fct.	Time/Date Time Date Delay on	: 10:4 : Tu. 02.06.99 :: off::	
Escape			Function

Fig. 16: Entering time/date

Entering the time or the date is carried out under the >Time functions< menu point, which is accessed by pressing the corresponding function key.

The corresponding input field (hour, minute, day, etc.) is marked using the cursor keys and the desired value is entered on the numeric keypad. When a date is entered >DD.MM.YY<, the day of the week (Mo, Tu, We...) is automatically calculated.

Escape	$\Rightarrow$	Exits the menu point without storing the changes/inputs
Function	$\Rightarrow$	The numeric values shown in the display are stored

Entering times for the function >Delay/Verify< refer to chapter 4.7!



Without the need to press any additional buttons, the display switches back automatically to the last menu point <u>without</u> storing the changes/inputs!

## 4.3 Zones

### 4.3.1 Switching on / resetting a zone

With switch-on / reset, a zone, which has been switched off -incl. all fire alarms-, is switched into the operative status or an operative zone is reset and any imminent messages such as >Fire or Trouble< are deleted.



Fig. 17: Switching on / resetting a zone 4 (example)



Fig. 18: Display switching on zone 4

### 4.3.2 Disconnect a zone

With the disconnection, the corresponding zone -incl. all fire alarms- is disconnected. The zone is selected by means of the corresponding zone number.



Fig. 19: Switching off / resetting a zone 4 (example)



Fig. 20: Display switching off zone 4

In addition to the message on the display, the Disconnect is indicated optically by the common display >Disconnect< on the control panel and the corresponding continuous lighting of the yellow LED on the single zone indicator unit (if present).

Zone: 0004	Det: 15	11:10	22:11
Additional tex	xt (client text)		
Service	Time funct.	In	fo
	Zone: 0004 Additional te Service	Zone: 0004 Det: 15 Additional text (client text) Service Time funct.	Zone: 0004Det: 1511:10Additional text (client text)ServiceTime funct.

Fig. 21: Disconnect to status display



A disconnected zone will not signal an alarm in the case of an event!

### 4.3.3 Status of a zone

With this function, the current status, e.g. >Normal<, >Alarm< and >Trouble<, of the corresponding zone can be interrogated directly.





Fig. 23: Display Status zone 2

### 4.4 Detectors

Functions relating to detectors are only possible for addressable fire detectors. These fire detectors can be selected and controlled by a detector address.

### 4.4.1 Switching on / resetting a detector

With switch-on, an individual disconnected detector of the selected zone is switched into the operative status or an active detector is reset and any imminent messages such as >Fire< or >Trouble< for this detector are deleted.

Please note that the zone number has to be entered before the detector number.



Fig. 24: Switching on zone 2 /detector 12 (example)



Fig. 25:Display switching on zone 2 / detector 12

### 4.4.2 Disconnect a detector

With the disconnection, an individual detector of the selected zone is disconnected. In addition to the message on the display, the disconnection of the detector is indicated optically in the Common display Disconnect field.

Individual detectors within a zone can only be disconnected if addressable detectors are used. Series 9000 and ES Detect standard fire detectors cannot be disconnected individually.

Please note that the zone number has to be entered ahead of the detector number.



Fig. 26: Disconnect zone 2 /detector 12 (example)



Fig. 27: Display disconnect zone 2 / detector 12

A disconnected detector will not signal an alarm in the case of an event!

### 4.4.3 Status of a detector

With this function, the current status, e.g. >Normal<, >Alarm< and >Trouble<, of the corresponding detector can be queried directly.

Individual status query within a zone is only possible if addressable detectors are used.

Please note that the zone number has to be entered ahead of the detector number.



Operation Status:	Zone : 0002 normal	Det : 0012
End		

Fig. 29: Display Status zone 2 / detector 12

## 4.5 Controls

### 4.5.1 Switching on a control

With the switch-on, a previously switched off control (relay, open collector output) is switched back on. In case of an event, the switched-on output will be controlled in accordance with the programmed control conditions.



Fig. 30: Switching on Relay 2 (example)

Operation	On
Relay : 2	in progress

Fig. 31: Display switching on Relay 2

### 4.5.2 Disconnect a control

With the disconnection, a control (relay, open collector) is disconnected. In addition to the message in the display, the Disconnection of the control is indicated optically in the Common display disconnect field.



Fig. 33: Display disconnect Relay 2

Relays may be set to >inverse< by means of customer data programming of the IQ8Control. In this case, the relays will be activated in the normal state of the FACP and deactivated in case of the associated event.

If a relay for which >inverse< activation has been programmed is disconnected, it will be deactivated. Control of external equipment depends on the way in which it is connected to the NO/NC contacts of the relay.



- The equipment connected to a disconnection control (e.g. alarm devices) is <u>not</u> activated in the case of an event.
- It is <u>not</u> possible to switch off the connected alarm unit.

### 4.5.3 Status of a control

With this function, the current status, e.g. >Normal<, >Activated<, >Disconnection< or >Trouble< of the corresponding control can be queried directly.



Press key

Fig. 34: Status Relay 2 (example)



Fig. 35: Display status Relay 2

Relays may be set to >inverse< by means of customer data programming of the FACP IQ8Control. In this case, the relays will be activated in the normal state of the FACP and deactivated in case of the associated event.

In normal operation of the FACP IQ8Control, relays programmed for >inverse< activation are indicated as 'active'.

### 4.6 Common display of the status messages

In the common display >Overview<, all current messages such as >Fire<, >disconnection<, >Trouble< and other conditions of the fire alarm control panel are displayed, sorted by priority.

If more messages are imminent than can be shown in the display, it is possible to "scroll" in the display with the cursor keys.

Fire Switch-off Switch-off AE	: 1 me : 1 me : 2 me	essage essage essages	13:51	28:04
Status	Service	Time func.	Alarm	counter

Fig. 36: Display overview

For a detailed status display of a particular message, mark the corresponding message line with the cursor and press the function key >Status<.

1. FIRE Det	Zone : 002 EDP room, pa	Det : 02	14:10	28:04	
	pa				·
Overview	Service	Time func.	Ir	fo	_2

Fig. 37: Display for a detailed status message fire alarm (example)

- ① Additional text line associated with the triggered zone/detector (example).
- ② Additional information or parameters may be displayed by pressing function key >Info<.

### 4.6.1 Delay times for activations

In access level 3, delay times can be programmed and deactivated for the activation of alarm devices, master boxes and fire protection equipment:

a) Alarm devices: For activation by automatic fire detectors and manual (fire) alarms or

detector groups.

- b) Master boxes: For activation by automatic fire detectors or detector groups.
- c) Fire protection equipment: For activation by automatic fire detectors and manual (fire) alarms or

detector groups.

The delay can be enabled or disabled with a manual operation in access level 2. The delay can be cut short in access level 1 or with a manual (fire) alarm.

## 4.7 Delay and Verify

A switching time can be entered under this menu point >Time functions< by the operator of the fire alarm system in addition to the switching times programmed under the >Delay/Verify< function in the customer data (if programmed by the installer).

Please consult your installer to find out whether the function >Delay/Verify< has been programmed in the customer data of your fire alarm control panel. If this function is not activated, e.g. for technical reasons or requirements, the functions described in this section <u>cannot</u> be used.

If a fire alarm occurs during the active function >Delay<, the MB is only activated after the expiry of the programmed delay time (max. 600 seconds). If the key >Verify< is pressed during the delay time, the delay of the activating of the master box is extended by the verification time programmed in the customer data (max. 600 seconds). The cause of the alarm can be verified in this period.



After the expiry of the delay and the verification times, the MB is activated automatically if the alarm state has not been cancelled and the activation of the MB inhibited by pressing the >panel reset< key.

Time func.	Time/Date Time Date Delay on	: 10:42 : Tu. 02.06.99 : : off::	
Escape		Fur	iction

Fig. 38: Entering a switching point for the delay time

If a switching time for the function >Delay/Verify< has been programmed in the customer data by the installer of the fire alarm system, the **first switch-on time and the first switch-off time** is accepted as the valid switching time when an additional switching time is entered under this menu point >Time functions<. Exceptional days can be specified in the customer data programming on which the automatic, i.e. delay/Verify times programmed by the installer will not take effect.

### Example:

Customer data programming:	Switch on <b>06.30</b> , switch off 21.30
Operator's entry under this menu point:	Switch on 10.00, switch off <b>15.00</b>
Valid switching time:	Switch on 06.30, switch off 15.00

### 4.7.1 Delay and Verify

By pressing the >Delay< key, the function >Delay< is started or ended manually (toggle function). The activated delay function is indicated on the operating panel by the continuously illuminated yellow LED >Delay<.



#### Fig. 39: Delay key

If a fire alarm occurs when the delay function is activated, the activation of the MB is delayed by the delay time programmed in the customer data (max. 600 seconds). The blinking yellow LED indicates the initiated delay time in the operating panel.

### Verify

If the delay time has been started due to a fire alarm, the activation of the MB can be delayed additionally to the delay time (max. 600 seconds) by the verification time (max. 600 seconds) for the >Verify< of the cause of the alarm by pressing this key.



Fig. 40: Verify key



For the >Delay< and >Verify< functions, pay attention to the guidelines of VdS Schadenverhütung GmbH.

### 4.8 Alarm counter

Differentiated display of the detected alarm signals from fire and technical alarm zones for this individual FACP and the aggregate value of all other fire alarm control panels interconnected in the essernet<sup>®</sup>.

Alarm counte	r		10:24	10:05
Fire alarm Tech. alarm	: 6 : 2	Sum Sum	: 50 : 2	
Overview				

Fig. 41: Display alarm counter

#### **Example display**

This fire alarm control panel has detected 6 fire alarms and 2 technical alarms up to now. The sum of all alarm signals detected in the essernet<sup>®</sup> network amounts to 50 fire alarms and 2 technical alarms (TAL alarms).



The alarm counter can be reset with the programming software tools 8000.

### 4.9 Lamp test

Using the >Lamp test< function, all the light emitting diodes (LED) and the internal panel buzzer are activated for approx. 10 seconds to check the optical and audible display of the operating panel.



Fig. 42: Lamp test start

- All optical displays (LED) of the operating panel and the single zone indicator unit (if installed) illuminate
- The display area of the display is completely darkened
- The control panel buzzer sounds
- The version number of the panel software is then shown on the display

This function ends automatically after approx. 10 seconds! Pressing the >Test< key again stops the lamp test before the expiry of 10 seconds!

## 5 Service Level

The service level allows the operator to carry out operations or to switch off individual fire detectors and primary loops in a functional fire alarm system.

These functions can also be performed on interconnected FACP's integrated in the essernet<sup>®</sup> network, i.e. independently of the control panel.



Fig. 43: Function key "Service" in the status level



Fig. 44: Display in the service level

The following operations and switch-offs can be carried out in the service level on the fire alarm control panel without entering an authorisation code:

1 Sensor function (loop)	(refer to chapter 5.1)
--------------------------	------------------------

2 Sensor function (zone/detector) (refer to chapter 5.2)



- The service level 3 (Installer) is protected from unauthorised access by means of an access code. Any operation of the FACP may only be carried out by authorised and trained persons under observance of the safety precautions and, if necessary, in cooperation with the emergency services (e.g. fire department).
- Option 1, primary loop function, can be selected in access level 3 refer to chapter 5.3.

## 5.1 Sensor functions (loop)

Using this function, detector sensors of the intelligent fire detector such as all O sensors (Optical = photoelectric sensor) or all I sensors (I = ionisation smoke sensors) or in OHG intelligent detectors the OG sensor combination or in OHI intelligent detectors the OI sensor combination in an loop can be switched off.

If, for example, OHI intelligent detectors are disconnected with the function >OI sensors off<, only the third sensor - the H sensor (heat sensor) - remains active. Disconnecting the heat sensors (H sensors) is not possible.



Fig. 45: Sensor functions related to primary loops

O-detector	$\Rightarrow$	Optical fire detector with a single sensor (photoelectric sensor)
H-detector	$\Rightarrow$	Heat detector with a single sensor (Heat sensor)
I-detector	$\Rightarrow$	Ionisation smoke detector with a single sensor (Ionisation sensors)
OH-detector	⇒	Intelligent fire detectors with two various sensors (OT= Photoelectric and Heat sensor)
OHG-detector	$\Rightarrow$	Intelligent fire detectors with three various sensors
OHI-detector	$\Rightarrow$	(OTI= Photoelectric-, Heat - and Ionisation sensors)



It is only possible to switch off sensors with the OH, OHG and OHI intelligent fire detectors.



Deactivated groups and detectors do not register an alarm if an event occurs!

#### Example of switching off sensors in an loop:

- Enter the primary loop number of the loop in which the sensors are to be switched off and press the Select function key
- Enter the number of the desired function (1 = O sensor off, 2 = OI sensor off, 3 = I/G sensor off, 4 = all sensors on) or select the function with the cursor keys and press the Function key

The selected sensor type is switched off on all intelligent detectors on the loop.



It is only possible to switch off sensors with the OH, OHG and OHI intelligent fire detectors. If intelligent fire detectors are installed together with single-criteria detectors (detectors with just one sensor) on an loop, only the sensors on the intelligent detectors are switched off.

#### Switching on/off not permissible

The switching on/Disconnection of the detector sensors is indicated in the display.

- If sensors have already been disconnected in an loop, for example >I/G sensor off< for all fire detectors or if there are no sensors of the selected type in this loop or a zone disconnect has been detected, the message >Switch on/Disconnect not permissible< is displayed.</li>
- In an loop, it is generally only possible to execute a disconnection function, e.g. disconnected sensors or detectors, when no further, lower-order disconnected functions have been carried out; i.e. when individual detector sensors within a zone have been disconnected, this zone cannot be additionally disconnected, as disconnect functions for this zone have been carried out. However, it is possible to switch off other zones of this loop in which sensors/detectors have not been disconnected.

In order to change the existing sensor switching status, all disconnected detector sensors must first be switched on, for example with the command all sensors on. After >all detector sensors< have been switched on, a further switching off/sensor disconnect can be performed.

## 5.2 Sensor functions (zone/detector)

Using this function, it is possible to switch off sensors in zones or in individual fire detectors in an loop.

By entering the zone and detector number, individual sensors can be switched off in each single intelligent detector. If only the zone number is entered (detector number = 0), the desired sensor switch-off is performed for all intelligent detectors in this zone.

If sensors have already been switched off in individual intelligent detectors in this zone, the message >Switch on/off not permissible< appears. All sensors must first be switched on in this zone before the desired sensors can be switched off.

(See also Sensor function loop.)



Fig. 46: Sensor function related to zones/detectors



It is only possible to switch off sensors with the OH, OHG and OHI intelligent fire detectors. If intelligent fire detectors are installed together with single-criteria detectors (detectors with just one sensor) on an loop, only the sensors on the intelligent detectors are switched off.

If a switch-off has already been performed, e.g. the sensors of a zone have been switched off, this zone or the entire loop cannot be additionally switched off. It is possible to switch off other zones of this loop in which detectors or sensors have not been switched off.



Deactivated groups and detectors do not register an alarm if an event occurs!

## 5.3 **Primary loop functions (Access levels 3 and 4)**

Authorisation for access levels 3 and 4 is required in order to use the primary loop function.

Using this function, primary loops including all connected zones and loop devices can be switched on or off at the keypad.

The primary loop functions are configured by the Installer.

The switching state is indicated on the control panel and the display.

Primary loop / Transfer route Primary loop :	e 1 on / off 2 reset	
Func. menu	Repeat	Select

Fig. 47: Entering the primary loop number

#### Primary loops are:

- all loop modules included in this FACP (including the loop with all associated devices connected to this module)
- certain modules such as relays or the interface on the basic/peripheral module

#### Switch on / disconnect Primary loops:

- Enter the 4-digit primary loop number which is to be switched on and press the Select function key
- Enter the number of the desired function (1 = switch on/reset, 2 = switch off) or select the menu point with the cursor keys and press the >Function< key

In the case of an input error, pressing the Zone key can erase the display and the primary loop number can be re-entered.



All assigned zones and detectors are deactivated by disabling the modul of the primary loop. Deactivated groups and detectors do not register an alarm if an event occurs!

#### Slot and associated primary loop number

Individual modules in the panel can be switched on/off via the panel keyboard with the internal, four-digit primary loop number or may also be programmed by the Installer with the customer data editor. The internal primary loop number is made up from the panel number, the slot and the module number.



Example: FACP IQ8Control (Panel number 01)

Fig. 48: Example: FACP IQ8Control



## Novar GmbH a Honeywell Company

Dieselstraße 2 41469 Neuss, Germany Telefon: +49 2131 40615-600 Telefax: +49 2131 40615-606 Internet: www.esser-systems.com E-Mail: info@esser-systems.com





Technical changes reserved! © 2015 Honeywell International Inc.

