

# TFP 908 / 916 / 924 / 932

## Conventional Fire Alarm Panel

### INSTALLATION AND OPERATION MANUAL



Issue Date: 28/12/2015

#### FEATURES\*

Zone	8 / 16 / 24 / 32
Number of detector for each zone can be connected	25 (Teknim TF series)
End of Line Resistor	6,8kΩ
Power Supply	230V 35VA with internal transformer
Power Output	6-25V DC adjustable, 1A with automatic fuse
Siren Output	24V DC, 0,5A with automatic fuse 6,8kΩ End of Line Resistor
Fire Relay	30V 1A NC/NO dry contact, customizable
Trouble Relay	30V 1A NC/NO dry contact, customizable
Battery	2 pcs 12V 7Ah
Humidity	95% RH (max)
Temperature	-10°C ~ 55°C (14°F ~ 131°F)
Dimensions	370 x 310 x 100 mm
Weight	4,1 kg

\* May be changed without any notification.

#### WARNINGS

**Do not start the mounting unless read this manual completely.**

- Panel includes highly sensitive electronic circuits. Because of that reason, don't start to use unless read this manual completely.
- In case of any failure occur or need to maintain of the panel; all of these operations should be done authorized technical stuff only.
- All cabling should be done as indicated this manual.
- Do not attempt to change wiring while system under power tension.

- The panel must be earthed.
- Do not apply 230V AC 50 Hz to any inputs of the detector and button line, siren line connection, power connection of the electronic board.

#### DEVICE FEATURES

- 24V, 8 zone, can be increased to 32 zone
- Easy to use with large graphic LCD
- Has status, alarm and trouble LEDs
- Zone names can be entered
- 100 pcs event memory with date, time and zone information
- Night mode (automatic or manual)
- Pre alarm mode (can be set for each zone, can be cancelled from panel)
- Smart battery charger, long battery life (Able to see battery voltage on display)
- Plug & Play expansion modules, no programming necessary.
- EOL supervised siren output and zone inputs
- Zone type can be selectable as button or detector
- Zone test feature
- 6 ~ 25V adjustable power output with automatic fuse
- 1 pc NC/NO customizable fire relay (Button alarm, detector alarm etc.)
- 1 pc NC/NO customizable trouble relay (Mains failure, zone trouble, battery trouble etc.)
- Bypass feature, "BYPASS" led on the front panel, bypassed zones can be seen on LCD
- Key system to determine authorization level, Warning messages on screen when key needed
- Easy to understand front panel, menu system for easy programming
- Support for multi-language
- Switched power supply
- Metal box
- Ready places in box for expand modules
- Compact, small dimensions
- Used with 2 pc of 12V 7Ah battery

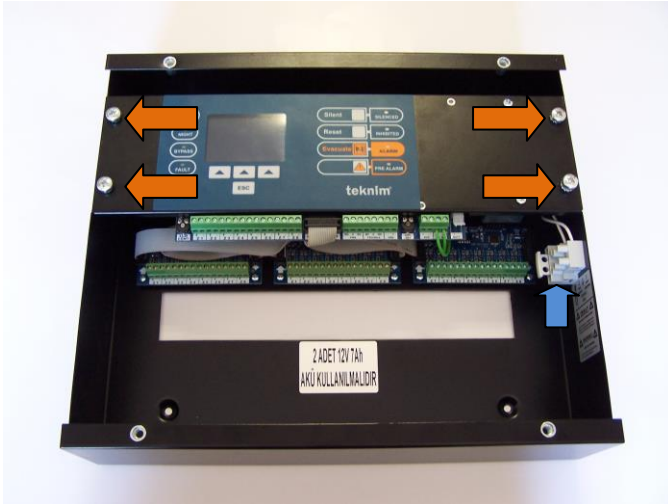
## MOUNTING

The chosen site for the mounting of the panel must be clean, dry and not subject to shock or vibration, also easy to reach for users. The panel must be placed at eye level and be sure that the chosen place is flat. Do not put the panel near to sources excessive heat or cold and any other cabinets. Panel cable entries from back and top of the panel are available for easy mounting.

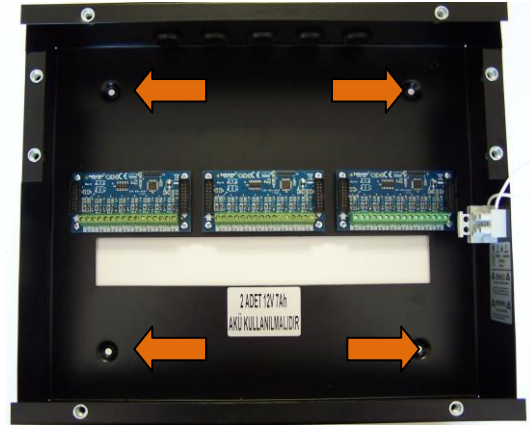
Firstly open the panel front cover by removing indicated screws. Necessary key which take off the screws, will provide with device



Then separate the cables which go to the transformer over by fused terminal block and completely separate front panel group by removing four screws which indicated with arrows.



Fix the panel on surface with provided screw apparatus by using four holes which is indicated by arrows.



Do not move mount of the panel from its place, should be fixed steady.

Put the remote panel on previous place then make the cable connection.

## POWER CONNECTION

Do electric connection to fused terminal block according to label.



**WARNING!**  
Do not use the device without earth connection.

## INPUT AND OUTPUTS



**Relay Outputs:** Panel has 2 pcs. 30V DC, 1A dry contact relay outputs which are fire relay (normally without power) and trouble relay (normally with power).

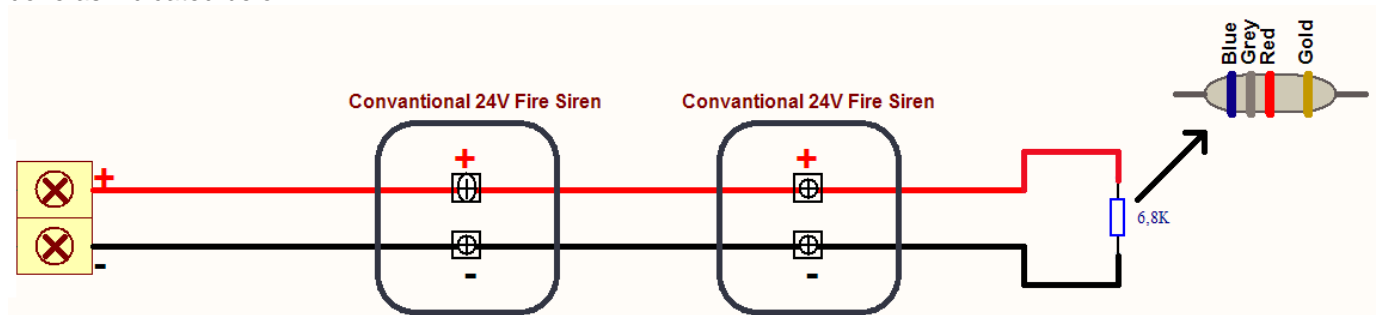
### WARNING!

The relays on the board are small current signal relays (30V, 1A). If need to command higher voltage or current devices, please use the appropriate devices such as contactor. Otherwise panel may be damaged which is out of-treaty of guarantee.

**Fire Relay (1):** While pressing on “Alarm Cancel/Alarm” button or when receiving fire alarm from detectors, it will change contact and get active position in order to use any other systems by remote control. In order to return to its initial position of active relay, fire condition must be ended and press on “Reset” button onto the panel.

**Trouble Relay (2):** It changes contact and get active position during trouble warning and without power panel. Trouble Relay returns to its initial position automatically as soon as trouble condition ends.

**Siren Output (3):** There is 1 pc. 24 V DC 500 mA siren output with automatic fuse protected. Overloading the output will cause fault on panel. The siren output is monitored with end of line resistor, in order to detect short circuits and trouble of breaking lines. Cable of the siren power line should be  $2 \times 1.5 \text{ mm}^2$  and connection should be done as indicated below.



**Power Output (5):** There is 1 pc. 6-25V adjustable DC 500 mA power output with automatic fuse. Overloading the output will cause fault on panel. In case of mains failure, power output will be supplied till battery ends. Voltage adjustment is done by trimpot (4) which is next to connection terminal.

**Power Input (6):** The system is designed to operate with 210V-240V AC 50Hz. Earth connections must be made from earth connector and earth resistor must be less than 10ohm. The mains supply of the panel must be via an independent automatic fuse rated 230 V AC 6A. This fuse must be separate from the other fuses and a caution note should be written such as “ATTENTION! FIRE ALARM CONTROL PANEL’S FUSE. DO NOT CLOSE DOWN”.

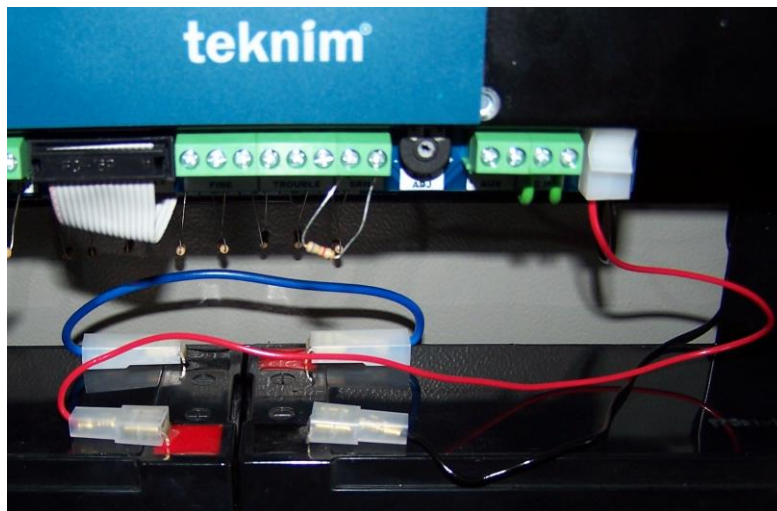
Recommended cable types for mains power supply are 3x2.5 NYM or 3x2.5 NYA. Do not connect or disconnect conventional area lines, supply lines, PCB connections while the panel is energized. Do not contact with system while the panel is energized.

### WARNING!

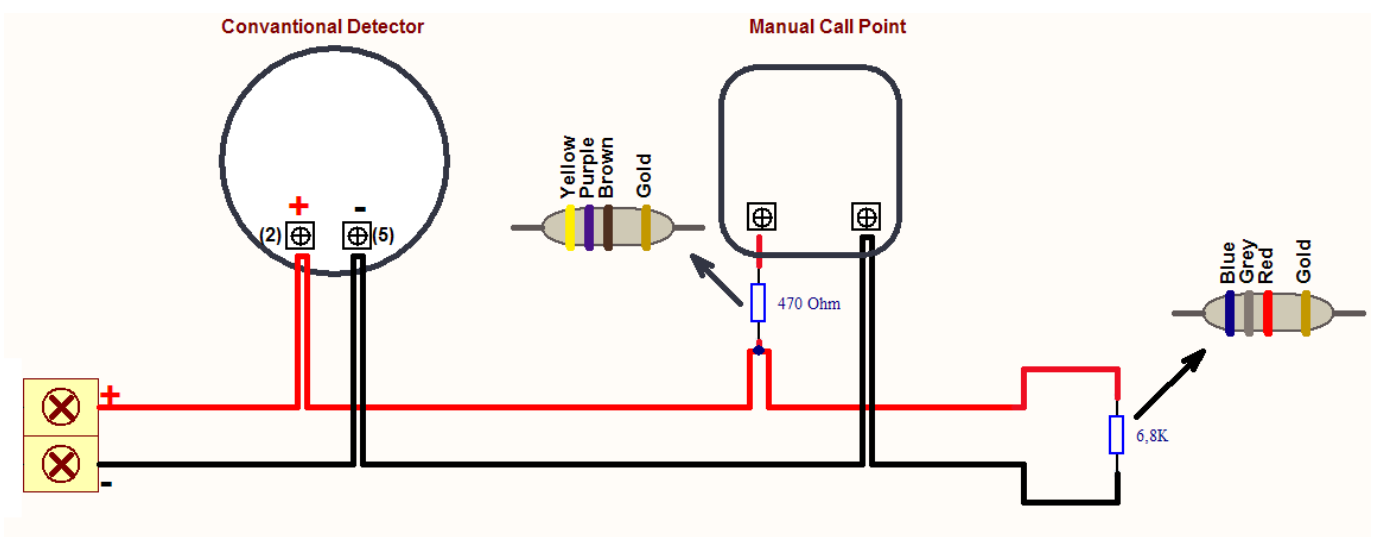
Do not use the device without earth connection.

**Battery Input (7):** Batteries provide continuity of operation with 2 pc. 12 V DC 7Ah sealed type battery during the mains power supply cut. The power supply can charge automatically. In case of faulty connection, panel may be damaged. Please make battery connection as indicated below picture.

**WARNING!**  
This device uses **2 pieces 12V 7Ah** batteries.



**Zone Inputs:** Zone inputs supply to detector and button powers (24 V DC) and provide to conduct signals such as fire, short circuit and open circuit. Each zone is capable of connecting up to 25 detectors and infinite number of buttons. Please make detectors and alarm buttons connection as indicated below picture.



Note: Each zone is capable of connection up to 25 pieces fire detectors. A 6.8KOhm resistor must be connected to unused inputs.

## FRONT PANEL



- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Power light</li> <li>2. Night mode light</li> <li>3. Bypass light</li> <li>4. Fault light</li> <li>5. Authorization level key: In order to reach the functions required high authorization level, key should be in horizontal (green) position. Device will produce short beep sound in case of key forgotten on horizontal position.</li> <li>6. Graphic LCD</li> <li>7. Left select button</li> </ol> | <ol style="list-style-type: none"> <li>8. Middle select button</li> <li>9. Right select button</li> <li>10. Escape button</li> <li>11. Silent button</li> <li>12. Silenced light</li> <li>13. Reset button</li> <li>14. Reset inhibited light</li> <li>15. Evacuate button</li> <li>16. Alarm light</li> <li>17. Pre alarm cancel button</li> <li>18. Pre alarm light</li> </ol> |
|---|--|

BUTTON	LEVEL 1 (KEY VERTICAL)	LEVEL 2 (KEY HORIZONTAL)	EXPLANATION
Left select button (7)	Used for the execute assigned task which is indicated on display		Use for searching menus and doing what LCD shows.
Middle select button(8)			
Right select button (9)			
ESC (10)	Return to previous LCD		
SILENT (11)	Silence the buzzer	Silence buzzer and siren	Silence cancel, while pressing again.
RESET (13)		Return to the panel normal working mode, reset the detectors, stop the alarm.	
EVACUATE (15)	While pressing during the pre-alarm, trigger the alarm.	Trigger the fire alarm	
PREALARM (17)	While pressing during the pre-alarm, trigger the alarm.		

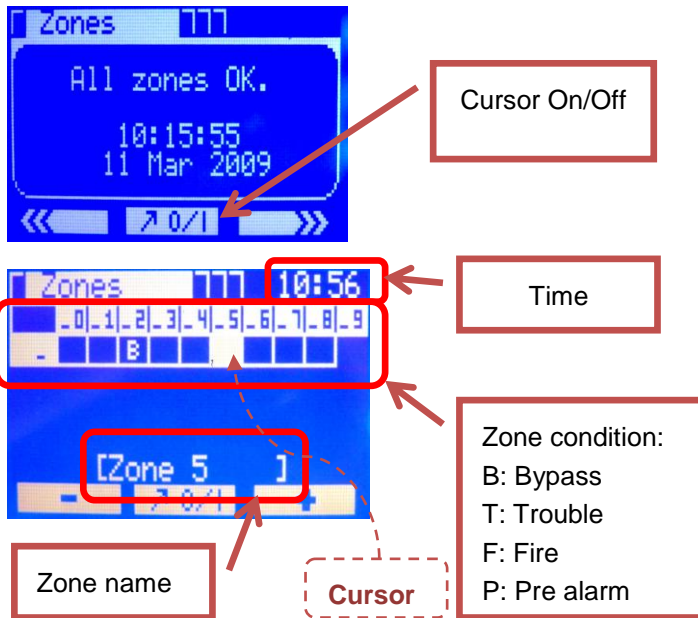
LED	CONTINUOUS LIGHTING	FLASHING
POWER (1)	Power ok.	Trouble on mains power or battery
NIGHT (2)	Night mode	
BYPASS (3)	Has at least one bypassed area on the panel	
FAULT (4)		There is a problem with system
SILENCED (12,9)	Silenced siren or buzzer	
INHIBIT (14)	Not allow to reset. Put the key horizontal position and then reset.	
ALARM (16)		Has alarm
PREALARM (18)		Has pre alarm

## INFORMATION LCD

LCD which is reached by pressing on ESC button or loading initial power to device is 'Zone Information LCD'. Can be visited LCDs via by using right (<<) or left (>>) select buttons.

## ZONE INFORMATION DISPLAY

If there is no alarm or problem at the area, it will look as below.



Can be visited zones via by + or – buttons. If one of the zones has fire, pre alarm or trouble, here above mentioned letters will appear on LCD.

Even if LCD is on in another mode, it automatically return to above LCD while having fire, pre alarm or trouble.

## SYSTEM STATUS DISPLAY



It is on left side of zone LCD.

Even if LCD is on in another mode, it automatically return to system LCD while having fire, pre alarm or trouble.

## EVENT LOG DISPLAY

Left ended side display.



Events and acts which happened in past can be abstarcted on memory LCD. Has memory of 100 acts. It is possible to visit between these acts via by up and down arrows. The oldest event is number 100 and and the newest is number 1.

Star (\*) which is flashing on the top right side, indicates that the record has not been read before.

Number which is next to explanation of event, indicates zone where event occurred.

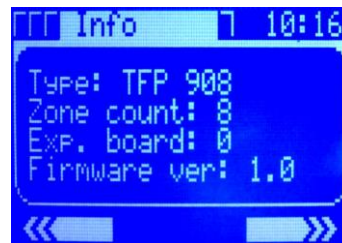
For instance ; "Trouble zone (7)" mean is that failure occurred in zone 7

In case having a new event, old event will be dropped from list without checking, has been read or not.

Here below the events on record zone:

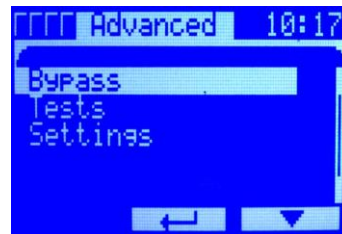
- 1 "Fire alarm (Zone no)"
- 2 "Evacuate "
- 3 "Zone trouble (Zone no) "
- 4 "Mains failure"
- 5 "Battery trouble"
- 6 "Siren trouble"
- 7 " Mains restored "
- 8 "Battery restored"
- 9 "Siren restored"
- 10 "Zone restored (Zone no)"
- 11 "System reset "
- 12 "Bypass done (Zone no) "
- 13 "Low Battery"
- 14 "Silenced"
- 15 "Bypass canceled (Zone no) "

## System Information Display

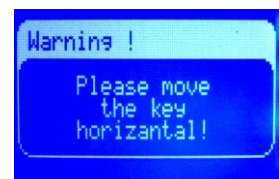


It is the LCD which shows information such as zone number, expand board number, type of device and software version.

## Advanced Display



Can be visited settings and other features of device via by operation LCD. In order to use this menu, key should be in horizontal position otherwise will receive warning message as below



## ADVANCED OPERATION

### BYPASS

Key should be in horizontal position for this operation.



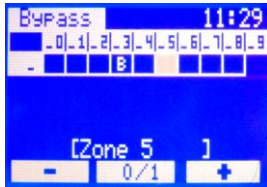
It means that put out of operation any section. Do not care with any alarm which comes from any bypassed zones. To prevent the wrong alarm because of failure detectors and cables, should use just for a short duration.

If there is bypassed zone, yellow light with numbered 3 will be on.

Bypassed zones will be indicated with letter 'B' on zone information LCD



In order to make or cancel the bypass, visit "Advanced" setting and choose "Bypass" option.



Choose the zone which intend to be bypassed by using "+" and "-" buttons then Bypass with "0/1" button. In case of pressing again this button, bypass will remove.

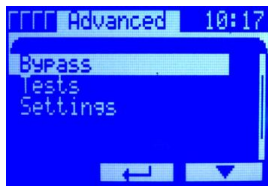
After bypass, yellow light with numbered 3 will be on. Bypassed zones will be indicated with letter 'B' on zone information LCD

### TESTS

Key should be in horizontal position for this operation.



In order to visit 'Test Menu', go to "Advanced" LCD then choose the "Tests" option

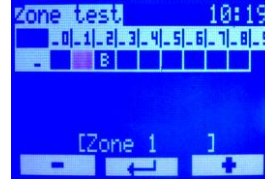


Following operations will be done by using the menu.

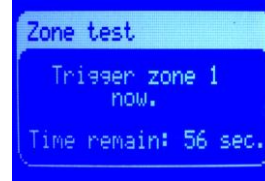
- Zone test:** After installation done, in order to supervise the installation, all zones will be checked one by one .
- LED test:** Provide to check by burning all LED just for a few seconds.
- Buzzer test:** Provide to check by ringing the buzzer just for a few seconds.
- Siren test:** Provide to check by ringing the siren just for a few seconds.

- Fire relay test:** Provide to control relay by changing position of the relay just for a few seconds.
- Trouble relay test:** Provide to control relay by changing position of the relay just for a few seconds.

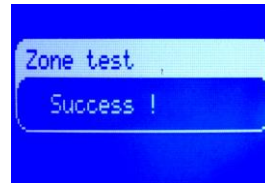
### Zone test



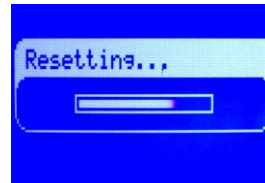
Choose the zone which intend to be bypassed by using "+" and "-" buttons then Bypass with "0/1" button.



Give 60 seconds time in order to receive alarm from the chosen zone.



During this time, if an alarm comes from the chosen zone, buzzer will give long and continuous warning sound which means test done successfully.

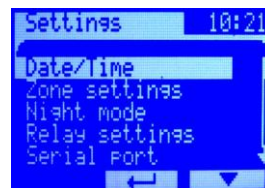


After 5-10 seconds, panel reset itself automatically and return to 'zone test menu'

During the 60 seconds if alarm does not come from the chosen zone, return to the test LCD regarding on a message which informs that test failed.

### SETTING

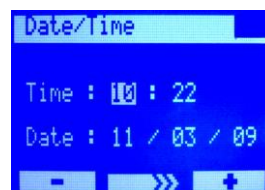
Key should be in horizontal position for this operation.



Visit "Advanced" LCD and choose "Settings" option. Then choose what you want to do.

### Date / Time setting

Choose date and time setting by following below options; "Advanced / Settings / Date-Time".



Choose the area by middle select button and adjust via by "+" and "-" buttons. Data formation is Day/Month/Year.

## Zone Settings

Reach zone setting by "Advanced / Setting / Zone setting".



Firstly choose zone number which will be adjusted. Visit between the zones by middle select button.

**Pre alarm:** while receiving alarm from related detectors, provide to ring only buzzer, not siren. Can be confirmed reliability of the alarm which received within the time.

**Type:** Chosen such as "Sensor" or "Button". No need to serial connection resistor to button when choose "Button"

**Name:** Give any wanted name to zone. Name cannot be more than 10 letter or number

"0123456789

ABCÇDEFGĞHIİJKLMNOÖPQRSŞTUÜWXYZ  
abcçdefgğhiijklmnoöpqrştuüvwxyz"

**Factory settings for all zones:**

**Pre alarm:** 0 sc.

**Type:** Sensor

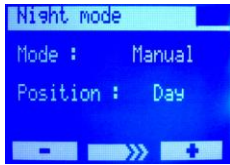
**Name:** Zone

## Night mode setting

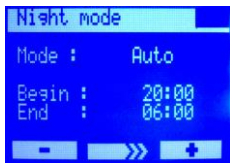
Reach night mode setting by "Advanced / Setting / Night setting".

Even if alarm at night mode, siren do not ring. Night light numbered with 2 is always on during the night mode.

**Control:** It will set how to go to the night mode has "Automatic" or "Manual" options.



**Manual:** The position at that moment will choose such as "Day" or "Night". It will remain active till next choice.



**Automatic:** according to adjusted time Day and Night changes are done by automatically.

**Factory setting is "Manual, Day".**

## Relay setting

Reach relay setting by "Advanced / Setting / Relays".

There is two more relays apart from siren relay such as fire and trouble relay.

These relays can be activated according to type of alarm and trouble. Reach setting by choosing related relay.

### Fire relay:



Fire relay will get active position according to chosen box.

**Detectors:** Alarm which comes from detectors from fire zone.

**Buttons:** Alarm which is given by manual alarm buttons from zone.

**Evacuate:** Alarm which is given by button on panel.

### Trouble relay:

Trouble relay will get active position according to chosen box



**Zones:** Troubles which occur from detectors and cables.

**Power:** Mains power failure

**Battery:** Trouble with battery.

**Siren:** Trouble with siren

**Factory setting:** All active for both relay.

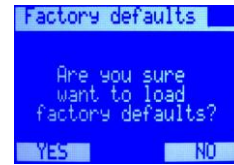
## Language setting

Reach language setting by "Advanced / Setting / Language".

Via by up and down arrows go to the wanted option and select by pressing on with middle select button or cancel with ESC button.

## Return to factory setting

Reach language setting by "Advanced / Setting / Factory setting".



## MALFUNCTIONS THAT REQUIRE TECHNICAL SERVICE

In case of any malfunction or below conditions contact with your authorized service,

- ✓ When Mains cable or the plug is harmed,
- ✓ Contact of device with a fluid,
- ✓ Exposure of rain and water,
- ✓ Fell down of device or harmed outer cover,
- ✓ Serious performance fall on the device,
- ✓ Depending on the instructions stated in manual, if your device not working properly, further usage or possible wrong usage may cause other malfunctions . Contact with your authorized service in such terms.

## MANUFACTURER

**Bilgi Elektronik A.Ş.**

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