TFP-21xx Series

Intelligent Addressable Fire Alarm Panels
Installation & User Manual

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*** Picture Belongs To TFP-213x Series.**

*** Sub Models**

TFP-2111	**Intelligent Addressable Fire Alarm Panel with Zone Indicator, 1 Loop**
TFP-2112	**Intelligent Addressable Fire Alarm Panel with Zone Indicator, 2 Loop**
TFP-2114	**Intelligent Addressable Fire Alarm Panel with Zone Indicator, 4 Loop**
TFP-2131	**Intelligent Addressable Fire Alarm Panel with Printer and Zone Indicator, 1 Loop**
TFP-2132	**Intelligent Addressable Fire Alarm Panel with Printer and Zone Indicator, 2 Loop**
TFP-2134	**Intelligent Addressable Fire Alarm Panel with Printer and Zone Indicator, 4 Loop**

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1 - Introduction

This manual contains installation instructions, specifications, and panel configuration information for TFP-21xx series Teknim Smart Addressable Panels.

TFP-21xx Teknim Smart Addressable panels can be examined in three optional categories as 1-loop, 2-loops or 4-loops. Up to 240 devices can be operated per loop on 1-loop and 2-loops panels while up to 127 devices can be operated per look on 4-loops panels, whereas all these devices operate with Teknim Flashlink protocol.

TFP-21xx series panels are in compliance with EN 54-2/4 standards. The manual must be read before installation and the installation must be made by authorized persons according to installation instructions.

As the last step before starting the installation, make sure that the pack contains the items in the following list:

- TFP-21xx panel,
- 4 pcs (TFP-211x and TFP-213x) 4K7 siren end-of-line resistors,
- Battery cable,
- Battery bracket and 1 screw,
- 4 pcs Wall mounting screw and dowel,
- Allen wrench,
- User manual,

2 - Warnings

- The panel contains electronic cards consisting of digital and smart circuits. Therefore, the operating manual must be read completely before use.
- In case of any failure or necessary maintenance works, the maintenance and repair operations must be carried out only by the authorized service of the manufacturer or the persons / institutions authorized by the manufacturer.
- Panel's feed line, siren line and detector line cables must be installed as instructed in this manual.
- Do not make any changes on the panel connections when the panel is live.
- Earth connection of the panel must be established.
- Do not apply the mains voltage of ~230 VAC 50Hz to the loop line inputs-outputs, siren line connection points and battery connection points.

Warning: Do not start installation before reading this manual completely!

3 - Technical Specifications

Supply	
Voltage	220 / 110 VAC (+%10 / -%15)
Frequency	50 / 60 Hz (±%5)
Mains Input Fuse	6A
Output Voltage	21 – 29 VDC ± %2
Output Fuse	6A (F1)
Cable Type	3 x 1,5mm² (Phase, Neutral, Earth)
Back-up Power Supply	2 x 12V, 7Ah (Recommended Yuasa NP7-12, 12V7Ah) 2 x 12V, 12Ah
Back-up Power Supply Cutoff Voltage	20,5 VDC
Back-up Power Supply Internal Resistance Fault	Resistance > 1,5 ohm
Maximum Current to be Drawn Form Back-up Power Supply	3A when the main power supply is not connected
Back-up Power Supply Fuse	6A (F2)
Charging Voltage	27,6 VDC @20°C, temperature compensation
Charging Current	500mA (with current limiting resistor)
Imin	TFP-2111, TFP-2131 – 130mA (1 Loop) TFP-2112, TFP-2132 – 180mA (2 Loop) TFP-2114, TFP-2134 – 280mA (4 Loop)
ImaxA	1A
ImaxB	1,5A
Outputs	
Monitorable Siren Outputs	4 pcs 24VDC (The output current of the panel should not exceed 1.4 A)
Siren Fuse	500mA (F6, F7, F8, F9)
Siren End-of-Line Resistor	4K7 ohm, %5, 1/4W
General Fault and Fire Relay	2 pcs
General Fault Relay	1 pcs NC/NO dry contact, 30V, 2A
Fire Relay	1 pcs NC/NO dry contact, 30V, 2A
Auxiliary Output (AUX)	1 pcs 24VDC
Auxiliary Output (AUX) Fuse	1 pcs 500mA (F4)
Programmable Auxiliary Output (PAUX)	1 pcs 24VDC (TFP-211x, TFP-213x)
Programmable Auxiliary Output (PAUX) Fuse	1 pcs 500mA (F5)
Programmable Relay (PRELAY)	1 pcs NC/NO dry contact, 30V, 2A (TFP-211x, TFP-213x)
Cable Type	2 x 0,8mm² J-Y(St)Y…Lg 2 x 1,5mm² J-Y(St)Y…Lg (Recommended)
Loop Information	
Number of Terminals	240 pcs for 1 loop or 2 loops (max.) 127 pcs for 4 loops (max.)
Output Voltage	32 VDC
Cable Length / Cross Sectional Area	1000m 0,8mm² Cross Sectional Area (@250 mA) 2000m 0,8mm² Cross Sectional Area (@75 mA) 1500m 1,0mm² Cross Sectional Area (@250 mA) 2500m 1,5mm² Cross Sectional Area (@250 mA) 3000m 2,5mm² Cross Sectional Area (@250 mA)
Repeater Panel Connection	
Output Current	500 mA (max.)
Output Voltage	24 VDC
Cable Length	1 km / 4 x 0,8mm² J-Y(St)Y…Lg (Recommended)
Environmental Conditions	
Temperature	-10°C ~ +55°C (14°F ~ 131°F)
Humidity	95% RH (max.)
IP Class	IP30
Physical	
Color	RAL7035 TEXTURE
Dimensions (H x W x D)	490 x 385 x 144 mm
Weight	8,40kg (w/o battery) (TFP-211x) 9,95kg (w/o battery) (TFP-213x)

- Device specifications may be changed without prior notice.

4 - TFP-21xx Series Smart Addressable System

TFP-21xx series smart addressable systems are the fire detection systems that can be divided into 72 zones in 1, 2 or 4-loop modes and support 240 or 127 devices per loop. Each loop to which 240 devices can be connected, is capable of performing fire detection and communication functions on 2500 meters long (with 1,5mm² cross-section) line. Panel also features 4 monitorable siren outputs, dry contact fault and alarm relays and 1 piece of 24V AUX output.

TFP-21xx series Smart Addressable systems can be configured with menu buttons on the panel. In addition, it can be programmed through Ethernet connection by using Teknim Addressable Fire Detection System Configuration Software. Besides, the panel can be accessed through Internet and monitoring can be performed by using Teknim Addressable Fire Detection System Configuration Software. Addressable Fire Detection System Configuration Software provides technical teams with ease of use for the configuration process.

Up to 16 panels can be networked with TdNET protocol support.

4.1 - Panel Features

- EN 54-2 and EN 54-4 certification
- 72 programmable zones,
- 240*64px wide graphic screen and LED indicators,
- Feature of assigning different delays to each zone,
- Easily applicable zone test,
- Easily manageable loop configuration and info menus,
- Automatic scanning of the entire loop and even detecting new connected devices,
- System configuration through panel or computer,
- 12000 events can be stored in memory,
- Flashlink protocol support,
- TdNet network protocol support,
- Ability to increase the capacity up to 7680 addressable devices and 1150 zones by means of TdNET Network structure,
- Access to panels on equal levels and ability to send commands by means of peer-to-peer communication network feature,
- 127 or 240 devices per loop (mixed connection can be established with smoke detectors, heat detectors, alarm buttons, sirens, input and output modules),
- Remote panel monitoring and management with TFP-1240/TFP-1245 intelligent addressable repeater panel connection,
- Locating the disconnections that may occur on the line precisely with duplex, intelligent loop control feature,
- 4 pcs independent and delay-assignable / monitorable siren outputs,
- 2 pcs 2A NC/NO dry contacts,
- 1 pc programmable 2A NC/NO dry contact,
- 1 pc Aux 24VDC 500mA output,
- 1 pc programmable Aux 24VDC 500mA output,
- Printer support, (TFP-213X printer support available. See. Page 41 – Article 7.13)
- Ethernet connector for computer connection (panel configuration and monitoring),
- Fast addressing with portable module,
- Night/Day time modes,
- Disabling zones, devices and outputs,
- Multi-language support, (English, French, Italian, Dutch, Lithuanian, Romanian)
- Functional menu keys for ease of use.

TFP-2111	Intelligent Addressable Fire Alarm Panel, with Zone Indicator, 1 Loop, supports 240 devices
TFP-2131	Intelligent Addressable Fire Alarm Panel, with Printer and Zone Indicator, 1 Loop, supports 240 devices
TFP-2112	Intelligent Addressable Fire Alarm Panel, with Zone Indicator, 2 Loop, supports 480 devices
TFP-2132	Intelligent Addressable Fire Alarm Panel, with Printer and Zone Indicator, 2 Loop, supports 480 devices
TFP-2114	Intelligent Addressable Fire Alarm Panel, with Zone Indicator, 4 Loop, supports 508 devices
TFP-2134	Intelligent Addressable Fire Alarm Panel, with Printer and Zone Indicator, 4 Loop, supports 508 devices

4.2 - Panel User Interface

The indicators and buttons on the panel are described under this title.

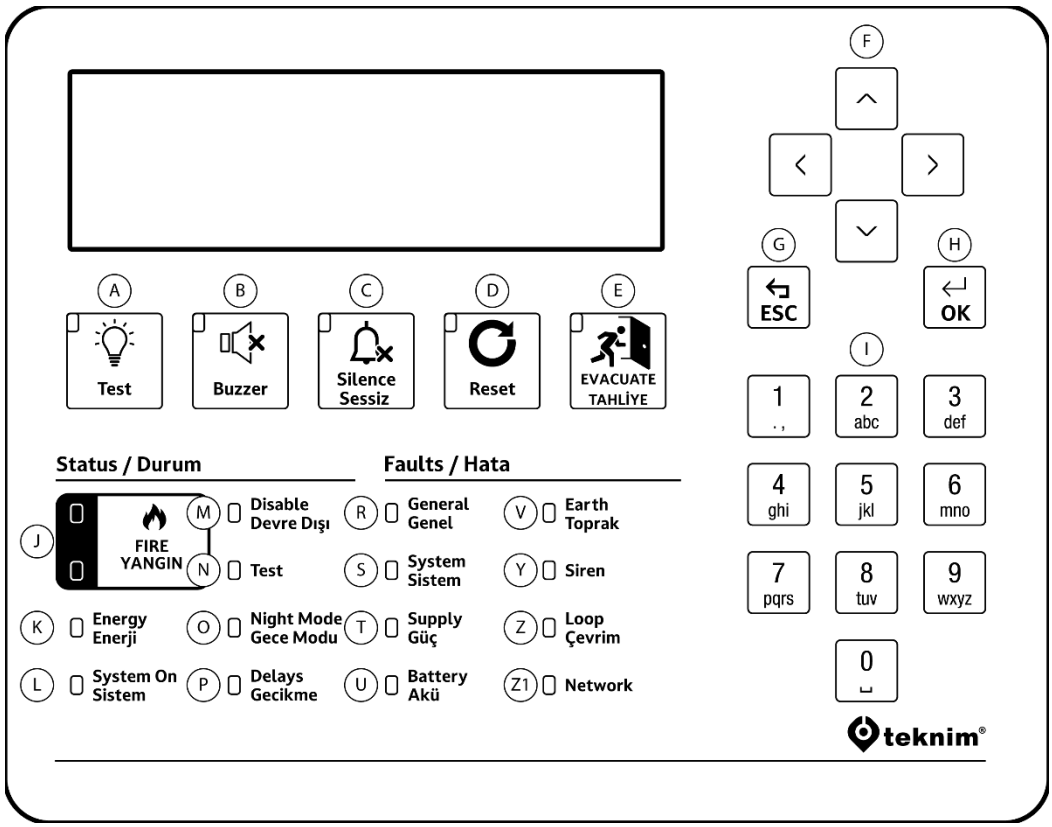


Figure 1 - Control Panel are as listed below.

The letters shown on the interface are listed below, respectively.

Table 1 - User Interface Button Functionality Table

Label	Function	
[A]	TEST	LCD, LED and Buzzer test. (test duration 5 seconds)
[B]	BUZZER	Mutes Buzzer in the event of an error or an alarm.
[C]	SILENCE	May be used on Level-2 and Level-3. Mutes sirens in case of alarm.
[D]	RESET	May be used on Level-2 and Level-3. Reset command is sent to all devices connected to the panel. It restores the panel in alarm or fault status to normal operating status.
[E]	EVACUATE	May be used on Level-2 and Level-3. Starts the evacuation procedure, activates sirens. Panel enters into alarm status.
[F]	UP - DOWN	Scroll up and down on menus and lists.
	LEFT-RIGHT	Move to the right or left between forms.
[G]	ESC	It includes functions such as exit, back, cancel, and so on. Used to access the "Status" window on the main screen.
[H]	OK	Performs the functionalities such as Enter, confirm, save and the likes. Press for entering the menu on main screen. Press and hold while on main screen for opening password entry screen or switching to Level-1.
[I]	Key Pad	Numbers 0-9. Allows entering values into the forms directly. Provides fast access by entering the line numbers on the lists.

Table 2 - LED Indicators

Label	LED Name	Permanent LED	Blinking LED	Color
[J]	Fire	N/A	Indicates that the panel is in alarm state (250 ms)	Red
[K]	Energy	Indicates that the system is being supplied from any source	N/A	Green
[L]	System On	Indicates that there is no problem in the peripheral units that will affect the proper operation of the system	N/A	Green
[M]	Disable	Indicates that the zones or devices or outputs are disabled	N/A	Yellow
[N]	Test	Indicates that one or more zones are being tested	N/A	Yellow
[O]	Night Mode	Indicates that the system is in night mode.	N/A	Yellow
[P]	Delays	Indicates that the output delays are active.	N/A	Yellow
[R]	General	Indicates that there is a system error. (lights up together with system LED)	Indicates any error in the system.	Yellow
[S]	System	Indicates that there is a system error	N/A	Yellow
[T]	Supply	N/A	Indicates that there is a malfunction in the power supply	Yellow
[U]	Battery	N/A	Indicates that there is a malfunction in the battery	Yellow
[V]	Earth	N/A	Indicates that there is a malfunction in the ground connection	Yellow
[Y]	Siren	N/A	Indicates that there is a malfunction in the siren	Yellow
[Z]	Loop	N/A	It shows errors related to the mainboard such as loss, open circuit, short circuit.	Yellow
[Z1]	Network	N/A	Displays the error status of the network.	Yellow

LCD must be observed for a more detailed error description of the LED indicators above.

5 - Installation

Mechanical and electrical connection methods related to TFP-21xx series panels are described under this title. Attention: Do not start installation without reading this manual completely!

5.1 - Recommended Cables

It is recommended for the cables that bear the specifications listed in **"Table 3"** to be used for cabling and all electrical connection purposes.

Table 3 - Specifications of Recommended Cables

Cable	Cable Properties	Maximum
Supply	3 x 1,5mm²	N/A
Loop Line	0,8mm² cross-section 0,8mm² cross-section 1,0mm² cross-section 1,5mm² cross-section 2,5mm² cross-section	1000m (@250 mA) 2000m (@75 mA) 1500m (@250 mA) 2500m (@250 mA) 3000m (@250 mA)

The maximum cable lengths for loop lines may vary depending on the cable type used and the loop load.

5.2 - Mounting

A clean and dry spot must be chosen for the mounting to protect he panel against shocks, vibration and intense heat. It must be observed that the mounting spot is easily accessible for the ease of use by the system users. The mounting height of the panel is required to be measure in a manner that the LCD screen and indicators are positioned at the eye level of users. There are cable sccess points on the back and top sides of the panel to establish surface-mounted and or flush-mounted cable connections.

1 Loosen A1 screws shown in **"10.1 Appendix-Mechanics / Figure 35 : Panel Front Cover Screws"** with the Allen key supplied together with the panel.
2 Using the panel as the template, mark the wall from the A2 screw holes shown in **"10.1 Appendix-Mechanics / Figure 37 : A2 Mounting Screw Holes"**.
3 Drill the holes marked on the wall and complete the anchoring process with minimum 8-mm dowel and 4-mm screws.
4 Then proceed to battery and cable connection procedures.

5.3 - Power Supply Input

The panel main power supply input must be connected to the 195~250 VAC 50 Hz mains voltage and earth connections must be made and functioning. Earth resistance must not be greater than 10 ohms. Main supply input fuse must be 6A. Besides, the panel feeder cable must be 3x1.5 NYM or 3x1.5 NYA. The connector is show in the electric connection detail in **"Figure 38 : A3"**

The connections must be made according to the tag as shown in **"Figure 38"**

WARNING!
Do not make any connections or disconnections when the system is live.

5.4 - Battery Connection

The panel is energized with 2 units of 12V leak-proof lead acid battery and the batteries having at least these features must be used. Battery installation must be done by observing the polarity as shown in **"Figure 39"** and they must be fixed through the screw points in a manner that the battery brackets shown with B1 will not move.

The ends shown with B3 and B5 in **"Figure 39"** and its diagram are connected to each other with the battery jumper cable that comes with the panel. Then the ends shown with B2 and B4 are connected to "BATT" as shown in the battery feeding detail of **"Figure 38 : A4"** by using the feeder cable.

5.5 - Button Cell

Remove the transparent non-conductor in the cell socket shown with C1 in **"Figure 43"** to activate the button cell that comes with the panel. If the transparent non-conductor is not in place, then the button cell is already in active state. The clock will be reset when the system is de-energized if the button cell is not activated.

5.6 - Inputs and Outputs

Relay outputs: The panel has 2 dry-contact relay output that can withstand a current of 2A at 30 VDC. These dry-contact relays are fire relay (normally non-energized) and fault relay (normally energized).

Important Note: The relays of the fire alarm panel are signal relays. A contactor must be used in between if these relays will operate a device as command relays. The panel may be damaged if a contactor is not used when the relay outputs are used in an application that draws high current and this situation is not covered with the warranty.

Siren Outputs: There are 4 pieces of 24 VDC 500 mA automatic fuse protected siren outputs on TFP-211x and TFP-213x panels. Drawing excessive amount of current from this output causes the panel to give errors. This output is being monitored by the end of line resistor against open circuit and short circuit errors. 2x1.5 mm² cables must be used for siren feed lines. Connections are shown in Connections are shown in **"Figure 44"**

Alarm Relay: In case of fire alarms received from sensor areas or when the contact is changed by pressing the "Evacuate" button on the panel's front face, it becomes activated and used for the purpose of commanding another system. The fire situation must cease or the "Reset" button on the panel's front face must be pressed for the activated relay to return to its previous state.

Fault Relay: In case of an error warning from the system and the panel is de-energized, it becomes activated by changing the contact. The fault relay automatically returns to its previous position when the fault condition ceases.

AUX Output (External Power Output): There is 1 piece of automatic fuse protected external supply output of 24VDC 500mA on the panel. In cases such as a power cut, the external supply output will be fed until the battery runs out.

Programmable AUX Output (PAUX): Only TFP-211x and TFP-213x panels have a programmable automatic fuse protected external supply output of 24VDC 500mA. This output can only be used with scenarios. In cases such as a power cut, it continues to output until the battery runs out.

Programmable Relay Output (PRELAY): Only TFP-211x and TFP-213x panels have 1 programmable relay output. This output can only be used with scenarios.

Printer Support: Available only in TFP-213x series. See page 41 - Article 7.13

5.7 - Loop Expansion Card Connection

TFP-21xx Teknim smart addressable panels support 2 or 4 loops. To add a new loop card to a 1-loop panel;

1. First, make sure that the panel is not live
2. Remove the screws on the three points marked "L1" in **"Figure 40"** and screw down the spacers that come with "TFC-1201 Addressable Panel Loop Card".
3. Attach the flat cable that comes with the card to the connector marked "L2".
4. Screw the loop card onto the spacers.
5. Attach the other end of the flat cable to the connector marked "L3" in "Loop Card".
6. Adjust the dip switch setting marked "L4" as "1-Closed, 2-Open, 3-Closed".
7. As the last step, energize the panel and change the loop active parameter to "Yes" as described in **"7.10.6 - Loop Parameters".**

Table 4 - Loop Card Dip Switch Address Settings

Dip Switch 1	Dip Switch 2	Dip Switch 3	Address
Closed	Closed	Open	1
Closed	Open	Closed	2
Closed	Open	Open	3
Open	Closed	Closed	4

5.8 - Loop Lines

TFP-21xx Teknim smart addressable panels can be examined under 3 options as 1, 2 or 4 loops. TFP-21xx series 2-loop panels are able to use 240 devices per loop while 4-loop panels are able to use 127 devices per loop, and all devices work with Teknim Flashlink protocol.

Loop line and the device connections (Class A) are shown in **"Figure 45"**. The idle loop line must be disabled through the panel or with the "Teknim Loop Configuration" software. If no connection is made to the loop, the panel will give "Loop X Open Circuit" error.

All devices connected to the loop line communicate with "Teknim Flashlink Protocol". All addressable devices that support this protocol may be connected to the loop line.

As all devices are connected in the manner shown in **"Figure 45"**, one short circuit isolator or addressable devices with short circuit isolators are required to be used for every 20 devices on the loop line. Short-circuit isolators prevent all loop devices from being disabled in case of any short-circuit that may occur in the loop line.

The loop cable should be kept away from high voltage cables that may interfere in the field environment.

Connect high current consumption loop devices as close to the panel as possible.

Every device connected to the loop line must be addressed with the TFCM-1801 addressing module.

5.8.1 - Class A Loop Connection

Class A loop lines are connected as shown in **"Figure 45"** and they must be monitored for short circuit - open circuit occurrences.

5.8.2 - Class B Loop Connection

Class B loop lines refer to the "end-of-line, or in other words, non-connected loopback" connection type. Class B connection type must be monitored for short circuit condition. In fact, this notification cannot be received when any open circuit condition occurs.

Important note: Class B loops are not EN54-13 compliant. No more than 32 devices can be connected to the Class B loop.

5.9 - Network Card Connection

TFP-21xx Teknim smart addressable panels are networkable systems. In order to activate the network feature of the panel, a new network card must be installed on the panel's motherboard. For this;

1. First, make sure that the panel is not live.
2. Remove the screws on the three points marked "N1" in **"Figure 40"** and screw down the spacers that come with "TFC-1208 Network Card".
3. Attach the flat cable that comes with the card to the connector marked "N2".
4. Screw the network card onto the spacers.
5. Attach the other end of the flat cable to the connector marked "N3" in **"Figure 41"**.
6. Finally, energize the panel and change the TdNET Mode as described in **"7.11 - TdNET Functions".**

5.10 - Repeating Panel Connection

TFP-21xx Teknim smart addressable panels support 1 repeating panel connection. For the repeating panel connection;

1. First, make sure that the panel is not live.
2. Make sure that the cable order is correct and attach the repeating panel cable to the connector marked "R1" in **"Figure 40"**.
3. Energize the panel and observe that the repeating panel is operational.
4. No configuration is required for the repeating panel to be activated.

The cable cross section between the TFP-1240/TFP-1245 Repeater panel and the TFP-21XX panel should be at least 4x0.8mm² and the cable length should be at most 1000m.

6 - Configuration

This section contains information about configuring and using the fire detection system.

6.1 - Panel Activation

Activation is a process that enables access to the programming menu for the initial setup of the addressable fire detection system. Initially, an activation code, which is a 4-digit password, is required for this procedure to be carried out.

The activation code is the first password of the programming menu, whereas this password may be changed later.

The activation code must be generated again if the programming password is forgotten.

6.1.1 - Activation operation:

1. Enter "000" on the panel. (press the "0" key 3 times)
2. After seeing the phrase "Enter password:" in the pop-up window, enter the 4-digit activation code and observe the information that the panel is activated on the screen.

6.1.2 - Generating the activation code:

1. Open www.bilgibayim.com web site and log in to the system with your dealer user name and password.
2. Go to the panel activation menu and enter the required information in the form that opens and generate a new activation code for the panel to be activated.

6.2 - User Levels

Some features of the panel are restricted to user levels and there are 4 user levels in the panel.

6.2.1 - Level 1

Level 1 is defined as the pre-defined user level with the simplest features. If the user is not logged in, the panel is at "Level-1". The authorizations of the Level 1 user are as listed below.

- Viewing the alarm list,
- Viewing the error list,
- Viewing the warning list,
- Viewing disabled devices,
- Viewing disabled zones,
- Viewing event log,
- LCD, Indicators and Buzzer Test,
- Disabling the buzzer

6.2.2 - Level 2

The users may enter Level 2 by using the password defined by the Level-3 user. The authorizations of the Level 2 user are as listed belowLevel-1 authorizations,

- Night/Day/Auto mode function,
- General delays On/Off function,
- Devices/Zones/Outputs disable and enable functionality,
- Clock setting,
- Zone test,
- Device led test,
- Viewing the alarm counter,
- Viewing technical service (contact) information,
- Viewing the device list,

Select "Menu » Exit" or press and hold the "ESC" key while on the main screen, to log out from Level-2.

6.2.3 - Level 3

All authorizations and all functionalities of the system (except scenario management) can be performed at this level. Users of this level are the authorized persons who have been trained for the installation and maintenance of the system.

Initially having the Level-3 password is required to pass to Level-3. If the panel is being configured for the first time, the Level-3 password is also the activation code.

Select "Menu » Login" and enter the 4-digit Level-3 password on the keypad to enter Level-3.

The message "Access Level 3 active" will be displayed on the screen if the password is correct. "Wrong Password!" warning will be displayed if the password is wrong.

Select "Menu » Exit" or press and hold the "OK" key while on the main screen, to log out from Level-3. The message "Access Level 1 active" will be displayed on the screen when logged out.

The authorizations of the Level -3 user are as listed below.

- Device parameters and tag description,
- Zone parameters and tag description,
- General delay parameters,
- Zonal delay parameters,
- Viewing panel values,
- Panel parameters,
- Date time setting,
- Loop functions,
- TdNET functions,
- Users,
- Service time setting,
- IP settings,
- Printer functions

6.2.4 - Level 4

Switching to Level-4 can be done with a special apparatus and software provided by the manufacturer. At this level, the user can access the memory of the program and reset the operating data of the field.

6.2.5 - Level Timeout

In case the panel becomes idle when the level logins are left active, the panel enters the time-out mode and the user level automatically switches to Level-1 for security purposes during the time-out period.

Table 5 - Level Time-Out Periods

User Level	Time-Out Period
Level-2	6 minutes
Level-3	30 minutes

The login methods of the levels must be re-applied to re-activate used levels.

6.2.6 - Entering Incorrect Password

If the user enters the password incorrectly 5 times, the system cancels the user password entry process for 30 seconds for security reasons. In other words, the user will be blocked for 30 seconds and warned about the blocking period. Users may use their passwords again after the 30-second blocking period expires.

6.2.7 - Forgetting Password, Setting New Password

If the password is forgotten, the "Level-3" user can change the passwords of all users. In case the "Level-3" password is forgotten, however, follow the steps under the title **"6.1 - Panel Activation"**.

6.3 - Computerized Configuration

Establish the computer connection as described in **"Figure 46"** and open "Teknim Addressable Fire Detection System Configuration Software". It is recommended to use "Teknim Addressable Fire Detection System Configuration Software" to get the best fire system installation results.

Software users are the authorized persons who have been trained for the installation and maintenance of the system.

Advantages of using the software:

- Configuration files can be rapidly created and applied to the panel,
- Valid panel configuration files can be downloaded, edited and stored,
- Advanced scenario rules can be created

The information on how to use the software can be found in the document titled "Teknim Addressable Fire Detection System Configuration Software".

6.3.1 - IP Settings

Follow the instructions below for automatic IP setting:

1 Open the main screen first.
2 Select "Menu » Programming » Network Settings » IP Settings"
3 Select "Automatic IP" form with direction keys and press "OK"
4 Select "Automatic IP" value as "ACTIVE"
5 Press "ESC" to save the new value.

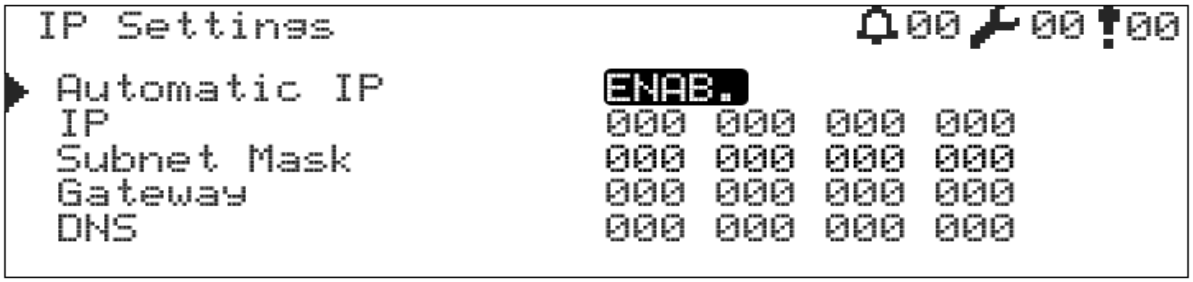


Figure 2 - Automatic IP Settings

The panel will automatically get the IP in a short time through the network it is connected to. The state can be checked by entering the IP settings menu again or by entering "011" on the main screen.

Follow the instructions below for manual IP setting:

1 Open the main screen first
2 Select "Menu » Programming » Network Settings » IP Settings"
3 Select "Automatic IP" form with direction keys and press "OK"
4 Select "Automatic IP" value as "PASSIVE" and press "OK"
5 Then, complete the IP settings by entering "IP, Subnet Mask, Gateway, DNS" information, as well.
6 Press "ESC" to save the new values

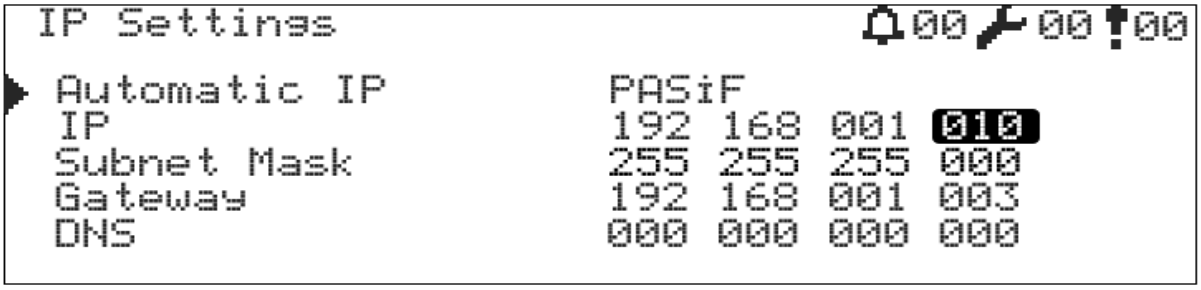


Figure 3 - Manual IP Settings

Filling in only the "IP" information is sufficient if it will be connected directly to a computer. "Subnet mask, Gateway, DNS" information must be entered as "0". However, the information such as "Subnet mask, Gateway, DNS" must be filled in if the panel will be connected to an external IP system such as AHM or Cloud through a network.

Following the registration, the socket connections will be disabled for about 5 seconds and then it starts communication by becoming activated again with the new values.

6.3.2 - Port Settings

A port value must be given to the panel to allow external connections to the panel. The port value is "10" by default. Follow the instructions below for changing the port value:

1 Open the main screen first
2 Select "Menu » Programming » Network Settings » Command Port Settings"
3 Select "Port" form and press "OK"
4 Enter the new port value and then press "OK" again
5 Press "ESC" to save the new values

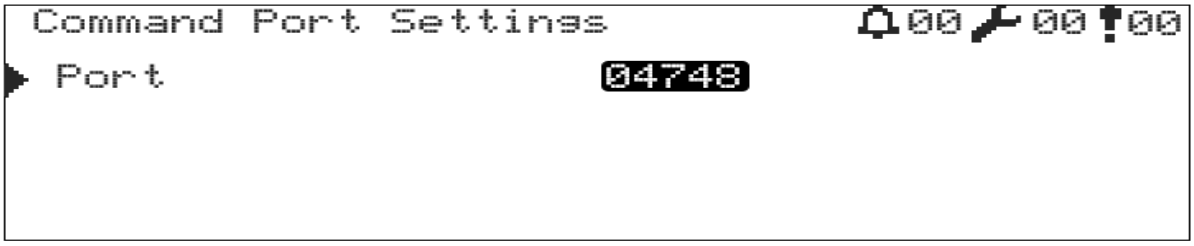


Figure 4 - Command Port Settings

6.3.3 - ARC Settings

Table 6 - ARC Setting Value

ARC Settings	Value
Active	ENAB. / DIS.
Subscriber	
IP	000 000 000 000
Port	00000
Protocol	CID

Follow the guidelines below to change the default values:

1 First, enter the main screen,
2 Select "Menu » Programming » "Network Settings" » "ARC Settings".
3 Navigate the forms with the arrow keys,
4 Go to the form to be changed and press "OK",
5 Use arrow keys to enter a new value and press the "OK" key.
6 Numeric keypad can also be used to enter the new value,
7 Press "ESC" key to save new values.

After the registration process, the socket connection is disabled for about 5 seconds and becomes active again with the new values.

6.3.4 - Remote Connection

Remote Connection Values

Remote Connection	Value
Active	ENAB. / DIS.
IP	195 155 129 074
Port	25000

Follow the guidelines below to change the default values:

1 First, enter the main screen,
2 Select "Menu » Programming » "Network Settings" » "Remote Connection".
3 Navigate the forms with the arrow keys,
4 Go to the form to be changed and press "OK",
5 Use arrow keys to enter a new value and press the "OK" key.
6 Numeric keypad can also be used to enter the new value,
7 Press "ESC" key to save new values.

6.4 - Configuration Through Panel

TFP-21xx panels come with some pre-defined values. Pre-defined configuration values are as follows.

Table 7 - Pre-defined Panel Parameters

Panel Parameters	Value
Panel Address	1
Panel Tag	Panel
Mode	Night
Language	Turkish
Led Blink	Yes
Zone Startup	1
Aux Reset	Passive
Earth Detection	Active
Alarm State Settings	
Maximum LED	30
Siren Repeat in Same Zone Alarm	Active
Siren Repeat in New Zone Alarm	Active
Siren Sound in Case of Gas Alarm	Active
Test State Settings	
Play Siren	No
Play Buzzer	No

Table 8 - Pre-defined Panel Delays

Delays	Value
General Delay	Closed
Delay Mode	Automatic
Delay Time	0

There are no devices added to the memory of a panel to be newly installed even though addressable devices are connected to the loop line. All devices come with the pre-defined parameters shown in the table below.

Table 9 - Pre-defined Device Parameters

Device Parameters	Value
Type	--
Zone	1
Tag	[Device xxx]
Night Sensitivity	High
Day Sensitivity	High
Disabled	No

Table 10 - Pre-defined Cycle Parameters

Loop Parameters	Value
Tag	[Loop xx]
Active	Yes (No on 1-loop panels)
Disabled	No
Cabling	Class A

Table 11 - Pre-defined Zone Parameters

Zone Parameters	Value
Tag	[Zone xx]
Disabled	No
Delay	General
Zonal Delay Time	0

Table 12 - Pre-defined Output Parameters

Output Parameters	Value
Disabled	No

6.4.1 - Panel Configuration Order

The steps below must be followed for panel configuration.

1 Login to Level 3
2 Panel time and date setting
3 Panel parameters setting
4 General delay setting
5 General zonal setting
6 Adding new devices
7 Device parameters
8 Zone parameters
9 TdNET (Network) parameters

6.4.2 - Login to Level 3

The system administrator must first login to Level 3 for the configuration settings to be made. Refer to the title "0 Level 3" for Level 3 login method.

6.4.3 - Panel Time and Date Setting

Correct setting of the panel time and date ensures real-time monitoring of the panel. Otherwise, the event log entries will not reflect the real-time events of the panel. In addition, since the start and end times on a day-to-day basis are the factors that determine the "Night/Day" mode of the panel, it is important to enter these values one by one for each day of "Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday". "Date, Time, Day Start and End Times" settings can be made in the date and time setting window. The steps below must be followed for panel time and date settings.

1 First, open the main screen and follow the instructions below.
2 "Menu » Programming » Set Date and Time"
3 Navigate between the forms by using direction keys.
4 Select the form you want to change and press "OK".
5 Enter the new value by using the direction keys and press "OK".
6 Press "ESC" to save the new values

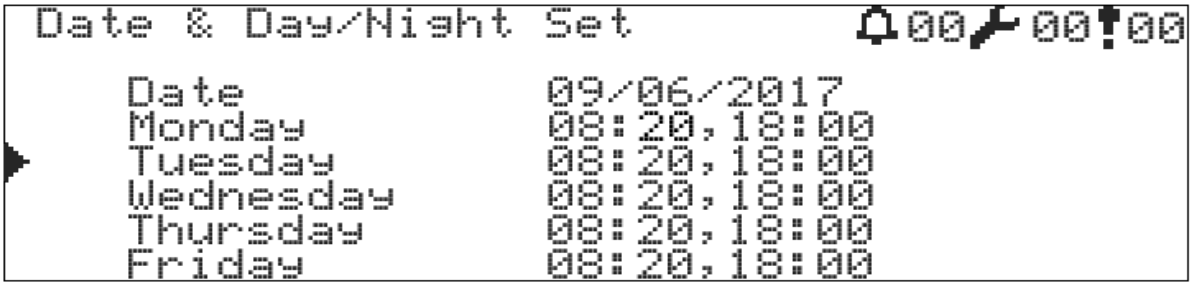


Figure 5 - Time and Date Setting

6.4.4 - Panel Parameters Setting

The values shown in **"Table 7"** must be set following the time and date setting. This step can be skipped if the Pre-defined values are suitable for the operation of the system. Follow the instructions below to change the Pre-defined panel parameters.

1 Open the main screen first.
2 Follow the path "Menu » Programming » Parameters".

The parameter values under this menu are explained below.

6.4.4.1 - Panel Address

Networked panels can communicate with each other with their addresses. Therefore, each panel must have its own unique address. Otherwise, the network will not work. If the panel is not included in a network, its address must be assigned as "1".

6.4.4.2 - Night/Day Mode

Select "Mode" form and press "OK" to change the day and night mode. The day/night functionality works in automatic mode depending on the time values in the defined time parameters. Delays and detector sensitivities at the outputs are taken into consideration according to day or night mode.

"Night/Day Mode" is transmitted to all network panels if the panel is included in a network and is set as the main panel.

Table 13 - Night/Day Mode

Value	Definition
Night	The sensitivities of fire detection devices are set to a predefined night sensitivity. The outputs are activated without delay in the outputs in case of fire if the delay feature is active at night.
Day Time	The sensitivities of fire detection devices are set to a predefined day time sensitivity. The outputs are activated at the end of the pre-defined delay period in case of fire if the delay feature is active at day time.
Automatic	The panel's day/night value is automatically changed according to the predefined day start/end time settings.

6.4.4.3 - Language Settings

Select "Language" form and press "OK" to change the language option.

Language options:

-Turkish -French -Dutch -Romanian

-English -Italian -Lithuanian -

Select one of the language options and press "OK" again.

6.4.4.4 - Loop Device Status LED

All loops devices blink their LEDs with 20 seconds intervals as pre-defined. In order to change the status LED

1 Select "Led Blink" form
2 Change the setting as "Yes" or "No"
3 Then press "OK"

6.4.4.5 - Siren Repetition in Different Zone Alarm

If the sirens are silenced, the choice of whether the alarms and sirens received from a new zone that did not send an alarm before will activate or not may be changed. For this;

1 Select "Siren Repetition" under "Alarm Status Settings" » "Different Zone Alarm"
2 Change the setting as "ACTIVE" or "PASSIVE"
3 Then press "OK"

As default, the sirens sound without assessment in cases of alarms received from fire buttons.

6.4.4.6 - Siren Repetition in Same Zone Alarm

If the sirens are silenced, the choice of whether the repeating new alarms and sirens received from a zone that sent an alarm before will activate or not may be changed. For this;

1 Select "Siren Repetition" under "Alarm Status Settings" » "Same Zone Alarm"
2 Change the setting as "ACTIVE" or "PASSIVE"
3 Then press "OK"

6.4.4.7 - Maximum Number of LEDs in Alarm State

This option defines the maximum number of device LEDs to be lighted in alarm state. Maximum number of LEDs can be 30.

6.4.4.8 - Sound Siren in Gas Alarm State

This option defines whether the sirens will be active or not in gas alarm state.

6.4.4.9 - Sirens in Test State

The choice of whether the sirens will sound or not for each detector alarmed in zone alarm test application can be changed under this option. For this;

1 Select "Sound Siren" form under "Test State Settings" option
2 Change the setting as "Yes" or "No"
3 Then press "OK"

6.4.4.10 - Buzzer in Test State

The choice of whether the buzzer will play alarm tone or not for each detector alarmed in zone alarm test application can be changed under this option. For this;

1 Select "Sound Buzzer" form under "Test State" option
2 Change the setting as "Yes" or "No"
3 Then press "OK"

6.4.4.11 - Zone Start Address

Each panel can be divided into 72 zones within itself. Zone start address can be used as a distinguishing feature, especially in networked systems, so that the zone addresses do not cause confusion between panels. Addresses can be selected as 1, 73, 145, 217,.... For example, if the zone start address is selected as 145 and the alarm LED number 1 is lighting on the instrument panel, it means that there is an alarm notification from zone 145. The remaining LEDs are continued logically.

6.4.4.12 - Resetable Aux

When the "Reset" button is pressed on the panel, the "AUX" output remains in the reset state for 5 seconds. To reset the output when "Reset" is pressed:

1 Select "Res.Aux" form
2 Change the value to "ACTIVE" and press "OK".

To keep the output fixed at 24VDC when "Reset" is pressed:

1 Select "Res.Aux" form
2 Change the value to "PASSIVE" and press "OK".

6.4.4.13 - Earth Detection

If the earth fault is required to be masked:

1 Select "Earth Det." form.
2 Change the value to "PASSIVE" and press "OK".

6.4.5 - General Delay Setting

The delay time can be activated only by the detectors. The alarm information received from the alarm buttons activates the outputs directly by ignoring the delay times. This feature must be activated first to use the delay feature. Besides, this feature can be changed to active/passive with day/night mode. Independent delay times can be applied to each zone.

To activate the delay feature:

1 Go to "Menu » Programming » Delays » General Delay" menu
2 Select "General Delay" form and change the value to "ON"
3 Select "Delay Mode" form and select one of the "ALWAYS", "NIGHT" or "DAY" options.
4 Select "Time" forms and enter the delay time in "hh:mm" format. The maximum allowed delay time is "09:59".
5 As the last step, save the values by pressing "ESC".

Table 14 - Delay Mode

Value	Definition
ALWAYS	Delay is active both night and day times
NIGHT	Delays become active when the panel goes into night mode
DAY	Delays become active when the panel goes into day mode

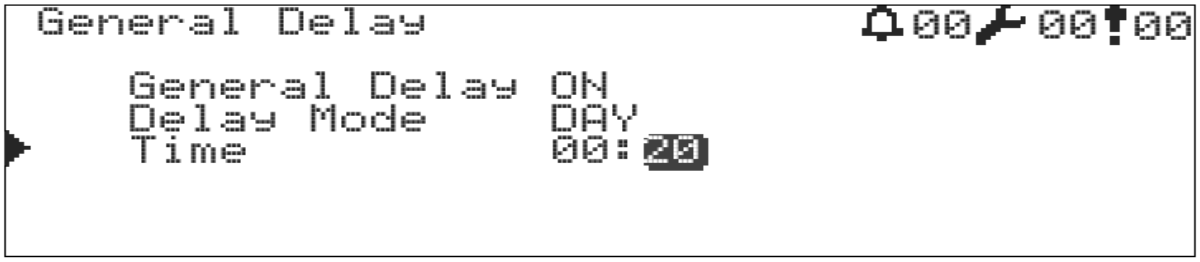


Figure 6 - General Delay Window

6.4.6 - General Zonal Setting

In case a special delay time is required to be applied to any zone other than the general delays or in case the delays are required to be canceled, a zonal delay must be applied to such zone. To set some zonal delays:

1 Go to "Menu » Programming » Delays » Zonal Delay" menu
2 Select "Zone" form and enter the number of the desired zone.
3 Select "Delay" form and change the value to "ZONAL"
4 "Time" form appears on the screen when "ZONAL" is selected
5 Select "Time" forms and enter the delay time in "hh:mm" format. The maximum allowed delay time is "09:59". If the occurrence of a zonal delay is not desired, the delay time must be entered as "00:00".
6 As the last step, save the values by pressing "ESC".



Figure 7 - Zonal Delay Window

6.4.7 - Adding New Devices

It is mentioned above under **"6.4 - Configuration Through Panel"** title that no device is present in the new panel memory. How to add the devices, addressed and connected to the loop line, to the system will be described under this title. Teknim TFP-21xx series panels are capable of adding devices in a simple and rapid manner. Refer to **"7.10.4 - Add Device"** title for adding new devices.

6.4.8 - Device Parameters

The parameters of the devices added in the previous step are configured in the same manner with the values in **"Table 8"**. Only the device type value received from the newly added devices during the loop query will be changed. Once this value is changed, it is stored in the panel memory as a non-changeable value. In order to change the device type, the device must first be deleted from the loop. Not allowing changing the device type prevents incorrect device use, and if another type of device is used instead of a particular device, this situation will be displayed on the screen as "Type Error".

If the computerized configuration is done, the device type will be stored as a value that cannot be changed directly, without the need for a loop query.

Device parameters and their meanings will be described under this title.

1 Go to "Menu » Programming » Device Programming » Loop Selection" menu.
2 Select the device to be programmed and press "OK".

6.4.8.1 - Device Zone

Select "Zone" form and enter the number of the zone in which the device is required to be located. Since TFP-211x and TFP-213x series panels can be divided into 72 zones, the value to be entered must be between 1 and 72.

6.4.8.2 - Device Tag

The tag can be shown as the best example of using the advantages of the addressable fire detection system. Tagging the devices will ensure that a fire alarm can be detected quickly. Therefore, naming the devices is of great importance. TFP-21XX series panels allow a maximum of 16-character long tag to be written for each device. To write a tag:

1 Select "Tag" form; proceed to the tag writing page from here.
2 On the tag page, type the 16-character long tag by using the keypad.
3 After the process is finished, press "ESC" key and save the tag.

6.4.8.3 - Day/Night Sensitivity

It may be desired to change the fire detection sensitivities of the detectors in night and day modes. Therefore, night sensitivity and day sensitivity can be set separately. For this:

1 Select "Night" and "Day" forms under "Sensitivity".
2 Select one of the values of "LOW", "MEDIUM" or "HIGH".

The higher the sensitivity, the faster the detectors will react to fire. Other options will reduce reaction rates compared to this.

6.4.8.4 - Input Activation Type

Input activation type is a parameter that is applicable only to the modules with input feature (Input Module, Externally Fed Input-Output Module, Dry Contact Input-Output Module, Conventional Zone and Siren Module).
It defines how this information will be evaluated by the panel when "alarm/active/input detection" information are created in the input module. This information can be evaluated in the following ways:

1 Alarm : When the activation information is received by the panel, it creates fire alarm information like detectors.
2 Evacuate: When the activation information is received by the panel, the panel acts as if the evacuate button is pressed.
3 Reset : When the activation information is received by the panel, the panel will be reset.
4 Silence : When the activation information is received by the panel, the panel will be muted.
5 Error : When the activation information reaches the panel, the panel gives an error message about the device.
6 N/A : Activation information will not be evaluated.

Modules can be used in scenarios regardless of the activation information.

To set the activation type:

1 Go to "Menu » Programming » Device Programming" menu
2 Select a module with the "Login" feature and press "OK"
3 Select "I. Activation" form and select one of the values of "Alarm", "Evacuate", "Reset", "Silence", "Error", and "Scenario".
4 Press "OK" and then "ESC"

6.4.8.5 - Monitoring Type

Monitoring type is a parameter that is applicable only to the modules with input feature (Input Module, Externally Fed Input-Output Module, Dry Contact Input-Output Module). It defines that the input will operate as "Normally Open" or "Normally Closed". The input value of the module is evaluated according to this parameter.

1 N. Open Circuit : When the normally open circuit - input circuit connection type is open circuit and the input circuit gets switched to closed position, the activation information will be transmitted to the panel.
2 N. Closed Circuit : When the normally closed circuit - input circuit connection type is closed circuit and the input circuit gets switched to open position, the activation information will be transmitted to the panel.

To set the monitoring type:

1 Go to "Menu » Programming » Device Programming" menu
2 Select a module with the "Login" feature and press "OK"
3 Select "Monitoring Type" form and select one of the values of "N. Open Circuit", "N. Closed Circuit".
4 Press "OK" and then "ESC"

6.4.8.6 - Latching Type

Latching type is a parameter that is applicable only to the modules with input feature (Input Module, Externally Fed Input-Output Module, Dry Contact Input-Output Module, Conventional Zone and Siren Module). It defines that the state changes occurring in the input module will be continuously monitored and the occurring states will always be reported to the panel or the state change will be evaluated once until the module reset command.

1 Latching : The status (input or error value) change in the input module gets evaluated once and transmitted to the panel. The input values will not be updated until the reset command is received, even if a new situation occurs.
2 Non-Latching : The status (input or error value) change in the input module gets evaluated continuously and each new status gets transmitted to the panel.

To set the latching type:

1 Go to "Menu » Programming » Device Programming" menu
2 Select a module with the "Login" feature and press "OK"
3 Select "Latching Type" form and select one of the values of "Latching", "Non-Latching".
4 Press "OK" and then "ESC"

6.4.8.7 - Tone Volume

Tone volume selection is a parameter that is applicable only to the siren of addressable fire alarm and addressable fire alarm w/flasher. The tone volume can be set as "Low, Normal, High" volume values under this menu. The volume of the siren tone at the time of the alarm is adjusted by setting these values.
To adjust the Tone Volume:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the tone volume will be set and press "OK".
3 Select "Tone Volume" line and press "OK".
4 Select a level among the options "Low, Normal, High".
5 Press "OK" and then "ESC"

6.4.8.8 - Tone Selection

Tone selection is a parameter that is applicable only to the siren of addressable fire alarm and addressable fire alarm w/flasher. 42 different tones can be set as tone selection, under this menu. The siren tone to be sounded at the time of the alarm is adjusted by setting these values.

To set the Siren Tone:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the tone type will be set and press "OK".
3 Select "Tone Selection" line and press "OK".
4 Make a selection among 42 siren tones.
5 Press "OK" and then "ESC"

6.4.8.9 - Flash Mode

Flash mode is a parameter that is applicable only to the flasher of addressable fire alarm and to the siren of addressable fire alarm w/flasher. Blinking frequency of the flash can be set among "Slow, Normal, Fast" modes as the flash mode selection under this menu. The flasher frequency at the time of the alarm is adjusted by setting these values.

To set the Flash Mode:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the flash mode will be set and press "OK".
3 Select "Flash Mode" line and press "OK".
4 Make a selection among "Slow, Normal, Fast" modes.
5 Press "OK" and then "ESC"

6.4.8.10 - Flash Intensity

Flash intensity is a parameter that is applicable only to the flasher of addressable fire alarm and to the siren of addressable fire alarm w/flasher. The flash brightness can be selected among "Dip, Normal, Bright" as the flash intensity under this menu. The flasher brightness at the time of the alarm is adjusted by setting these values.

To set the Flash Intensity:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the flash intensity will be set and press "OK".
3 Select "Flash Intensity" line and press "OK".
4 Make a selection among "Dip, Normal, Bright" options.
5 Press "OK" and then "ESC"

6.4.8.11 - Siren Test

The siren test feature is the parameter that is applicable only to the addressable fire alarm siren, the addressable fire alarm siren w/flasher and the addressable fire alarm flasher. Addressable siren can be tested under this menu.

To use the siren test feature:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the siren test will be carried out and press "OK".
3 Select "Siren Test" line, press "OK" and select "Run" position.
4 When the siren is in test mode, you can also test the siren by changing the "Tone Level, Tone Selection, Flash Mode, Flash Intensity" parameters.
5 After the siren test is completed, select "Siren Test" line again, press "OK" the and stop the test by selecting "Stop".
6 Press "OK" and then "ESC"

6.4.8.12 - Device Selection

1 Go to "Menu » Programming » Device Programming" menu
2 Select the addressable siren of which the device selection will be made and press "OK".
3 Select one of the devices among "Siren" , "Flasher" , "Siren + Flasher" options.
4 Press "OK and then "ESC"

Important note:
The siren operating limits for the loop board are determined by the current consumption.
Up to 8 sirens can be added to a circuit board depending on the current consumption in alarm state.
If more than 8 sirens are connected, it is displayed as a new device warning on the panel screen and is not added to the panel.

6.4.8.13 - Output Activation Type

Output activation type is a parameter that is applicable only to the modules with output feature (Externally Fed Output Module, Externally Fed Input-Output Module, Dry Contact Input-Output Module, Dry Contact Output Module, Conventional Zone and Siren Module, Smart Addressable Siren Module). Output activation type defines how the output modules operate when alarm or fault information occurs:

1 General Alarm : In case of any alarm or evacuation, the output modules will be withdrawn. They will not return until the "Reset" key is pressed.
2 General Siren : In case of any alarm or evacuation, the output modules will be withdrawn at the end of the delay time, if any, and immediately if there is no delay time set. They will not return until the "Reset" or "Silence" key is pressed.
3 General Error : In case of any error, the output modules will be withdrawn. The output will return to its previous position, as soon as the error is resolved.
4 Zone Alarm : The output modules will be withdrawn when a fire situation occurs within their own zones or if the evacuation is active. It will not return until it is reset.
5 Zone Siren : The output modules will be withdrawn within their own zones or if the evacuation is active when a fire situation occurs . They will not return until the "Reset" or "Silence" key is pressed.
6 Zone Error : Output modules will be withdrawn when an error situation occurs in their own zones. The output will return to its previous position, as soon as the error is resolved.
7 N/A : No evaluation will be made in any case.

Modules can be used in scenarios regardless of the activation type.

To set the activation type:

1 Go to "Menu » Programming » Device Programming" menu
2 Select a module with the "Login" feature and press "OK"
3 Select O. Activation" form and select a value among the options "General Alarm", "General Siren", "General Error", "Zone Siren", "Zone Error" and "Scenario"
4 Press "OK" and then "ESC"

6.4.8.14 - Reset Time

Reset time setting is a parameter that is applicable only to the conventional zone and siren modules. All conventional devices connected to the zone output of the module will remain de-energized during the "Reset Time" set when the "Reset" button is pressed on the panel. Thus, conventional devices can be reset. [0 – 255] seconds can be entered as Reset Time.

To set the reset time:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the conventional module of which the reset time will be set and press "OK".
3 Select "Reset Time" form and enter a second value between [0 - 255]
4 Press "OK" and then "ESC"

Default reset time is as follows:

Table 15 - Default Conventional Module Reset Time

Parameter	Value
Reset Time	5 seconds

6.4.8.15 - Currents [mA]

Current values are the parameters that are applicable only to the conventional zone and siren modules. The current values for "Normal circuit, Short circuit and Alarm" of the conventional zone can be set under this menu. The conventional products of other brands can be integrated into the system by setting these values.

To set current values:

1 Go to "Menu » Programming » Device Programming" menu
2 Select the conventional module of which the current values will be set and press "OK".
3 Select one of the "Normal Circuit", "Short Circuit", "Alarm" forms and enter a mA current value between [0 – 100]
4 Press "OK" and then "ESC"

Default current values are as follows:

Table 16 - Default Conventional Module Current Values

Current	Value
Normal Circuit	4 mA
Short Circuit	50 mA
Alarm	20 mA

6.4.9- Zone Parameters

There are zone tags and disabled parameters about the zones other than the device parameters. Zone parameters and their meanings will be described under this title. As the first step to set the zone parameters:

1 Go to "Menu » Programming » Zone Programming" menu
2 Select the zone to be programmed and press "OK".

6.4.8.16 - Zone Tag

In some systems, it may not be enough to only tag the devices. For example; in order to detect a fire in a building that has more than one meeting room, the "Meeting Room" written on the screen will not be sufficient to detect a fire that may break out in any meeting room. Besides, the presence of a tag that defines the floor on which the meeting room is located will make it more significant to detect fire. In this case, "Meeting Room 1st Floor" will be written on the screen.

To enter the zone tag:

1 Select "Tag" form; proceed to the tag writing page from here
2 On the tag page, type the 16-character long tag by using the keypad.
3 After the process is finished, press "ESC" key and save the tag.

7 - Use of Panel

The information regarding the use of panel and other features of the panel will be described in this section.

7.1 - Panel Clock Setting

Zone setting for UTC difference and daylight saving (DST) are also made from this window. The steps below must be followed for panel time settings.

1 First, open the main screen and follow the instructions below.
2 "Menu » Clock Setting"
3 Navigate between the forms by using direction keys.
4 Select the form you want to change and press "OK".
5 Enter the new value by using the direction keys and press "OK".
6 Press "ESC" to save the new values.



Figure 8 - Clock, UTC, DST Setting

Zone selection activates the panel's daylight saving (DST) feature. Enables the automatic time change to be applied in the selected region. Correctly setting the UTC Offset ensures that the automatic time change occurs at the correct time.

Regions to choose from:

• Europe,

• Israel,

• Lebanon,

7.2 - Status Window

The status window is the notification window where "Fire", "Error" and "Warning" messages regarding the operating data of the panel are instantaneously displayed. The notifications shown in the status window are critically important for the maintenance of the panel. If there is any notification, the user must take necessary measures, whereas, if no action can be taken, the authorized persons must be informed about the situation.

To access the status window:

1 Go to "Main Screen" and press "ESC"
2 In the status window, menus will be listed as "Fire" if any, "Errors" if any, and "Warnings" if any.
3 In order to get more detailed information about the situation, select the related option by using "DOWN" and "UP" keys and press "OK" and thus ensure the detailed notification list to be displayed.

7.2.1 - Fire Window

To access the fire list, select "Fire Alarm" from the "STATUS" window and press "OK". All fires that occur will be listed in this window with respective fire sequence number, tag and zone tag.

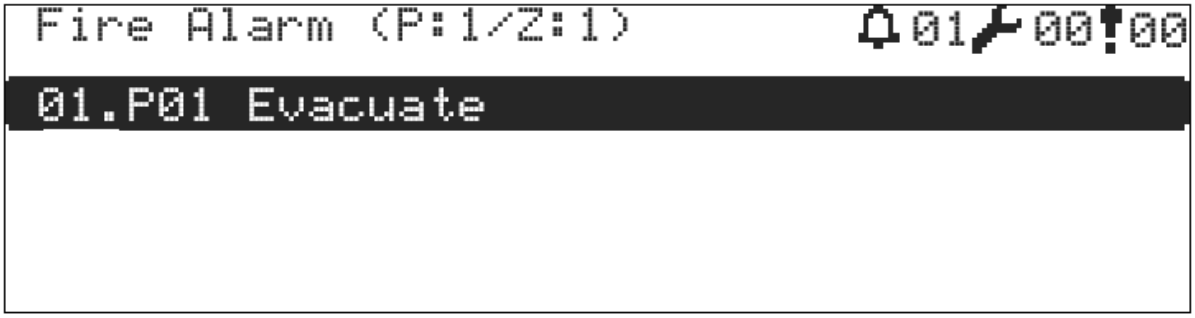


Figure 9 - Evacuate Notification

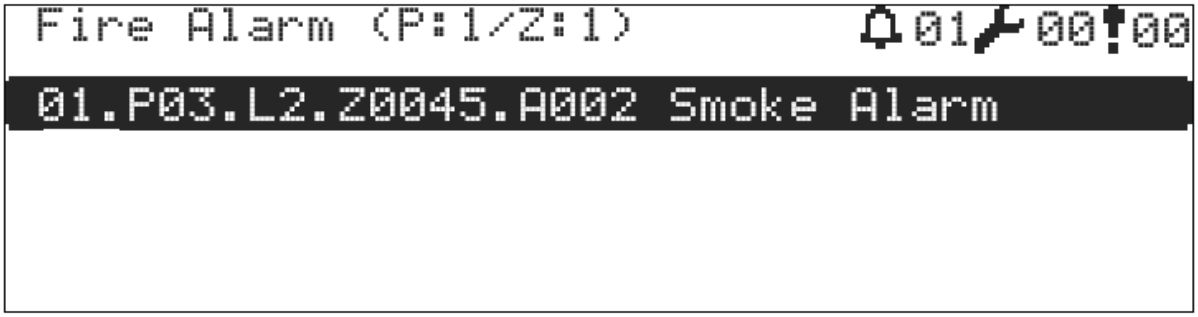


Figure 10 - Smoke Alarm Notification

In order to get more detailed fire information, select a fire from the fire list by using "DOWN" and "UP" keys and press "OK" and thus access the loop address, zone address and location address of the fire as well as the definitions of such locations. At the same time, the user can see the alarm details without pressing any button when a fire alarm is received.

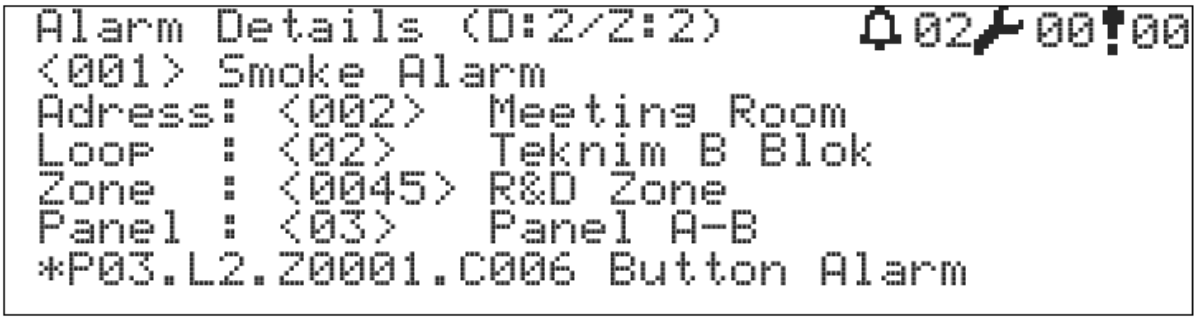


Figure 11 - Alarm Detail Window

7.2.2 - Error Window

Errors are the data types that will directly affect the operation of critical functions such as fire detection/notification on the system. To access the errors list, select "Errors" from the "STATUS" window and press "OK". All errors occurred will be listed in this window. If there are more than 99 errors, the rest of the errors will not be listed.



Figure 12 - Error Notifications

For more detailed error description, select an error from the errors list by using "DOWN" and "UP" keys and press "OK" and thus access the loop address, zone address and location address of the error as well as the definitions of such locations.

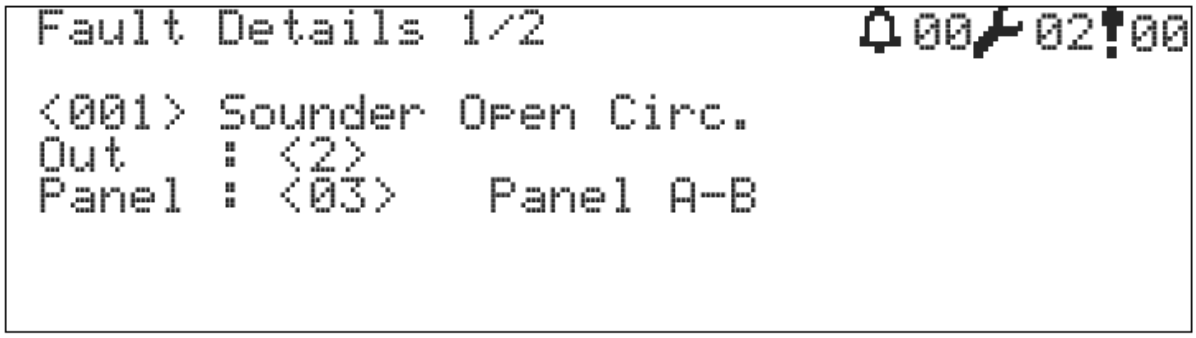


Figure 13 - Error Detail Window

The error types that may occur are as listed below:

1. **Battery Not Available**
   This error indicates that the battery below 2V is not available. "No battery" warning is displayed on the error screen. The error gets saved in the memory as "No battery".
2. **Battery Empty**
   The battery values lower than 20,5V are considered as empty. "Battery Empty" warning is displayed on the error screen. The error gets saved in the memory as "Battery Empty".
3. **Battery High Resistance**
   This error indicates that the internal resistance value of the battery has exceeded the acceptable level. The battery must be changed.
4. **No SMPS**
   SMPS is not connected or network is not available.
5. **Battery Charge Circuit**
   This error gets generated if the charging voltage is above the voltage value suitable for battery charging. Compensation gets taken into consideration.
6. **Earth High Voltage**
   There is an unwanted connection on the earth line. There has been a short circuit on the earth line (+) supply or on a line that has a potentially higher voltage.
7. **Earth Low Voltage**
   There is an unwanted connection on the earth line. There has been a short circuit on the earth line (GND) supply or on a line that has a potentially lower voltage.
8. **Siren [X] Open Circuit**
   Siren line opened, broken or terminating resistor not connected.
9. **Siren [X] Short Circuit**
   The two ends of the siren line are short-circuited to each other.
10. **Device [X] Not Available**
    The device has been removed, broken, or positioned on the open-circuit portion of the loop. Besides, this error is encountered in case of excessive current draw from the loop line. If the device has been removed, it is necessary to wait 40 seconds after the device is installed back in order for the error to be corrected.
11. **Device [X] Data Error**
    The loop line may be excessively affected by environmental factors. Check the earth connection. There may be a problem with the loop line connections. Check the connection points. If this error is not received from other devices under the same conditions, test the repetition of errors by replacing them with other devices. If the error continues, the device may be broken. If the error does not continue, try to protect the affected part of the line from environmental factors.
12. **Device [X] Write Error**
    The occurrence of this error is caused by the same reason in "N/A" and "Write" errors. This error is encountered during the installation of the system and during the programming of the device.
13. **Device [X] Short Circuit**
    This error indicates that the input is short-circuited in the input modules, and the load terminals connected on the output modules are short-circuited.

14 **Device [X] Open Circuit**
This error indicates that the input terminals are open circuit on the input modules. This error indicates that the load terminals are open circuit on the output modules.

15 **Device [x] External Power Problem**
This error indicates that there is a problem with the external power input of the output modules.

16 **Device [X] General Error**
If the activation type is selected as "Error" on the input modules, "General Error" warning will be displayed on the screen when the input gets detected.

17 **Device [X] Dirty**
There is debris in the smoke detector. It needs to be cleaned.

18 **Device [x] Type Error**
This error is generated if another type of device is connected instead of an address other than the current configuration.

19 **Loop Card [X] N/A**
The loop card does not respond to motherboard queries. There may be a problem in the cable connection between the main board and the loop card. The loop card may be broken or locked. In this case, restart and test the panel.

20 **Loop Line [X] Open Circuit**
There may be a disconnection on the loop line or the input and output ends of the loop line may not be connected. Locate the open point by performing «Loop Control» from the loop functions. When the loop control is performed, the expression "B:xxx, S:yyy" will be displayed on the screen. xxx: refers to the number of devices from the beginning of the loop line to the disconnection point, yyy: refers to the number of devices from the end of the loop line to the disconnection point.

21 **Loop Line [X] Short Circuit**
The loop line has been short-circuited. Locate the short-circuited point by monitoring the insulators.

22 **Network Not Available**
The network card does not respond to motherboard queries. There may be a problem in the cable connection between the main board and the network card. The network card may be broken or locked. In this case, restart and test the panel. Check the LED status on the network card.

23 **Network Open Circuit**
This error indicates that there is an open connection on the network line. In order to detect the open point, the LEDs on the network card must be checked.

24 **Printer Error**
The printer cover is open, the printer is out of paper, or the printer may be out of order. The printer must be checked.

25 **Printer Card Not Available**
The printer board is not responding to the motherboard. There may be a problem with the connections or the printer card may be faulty.

The error window opens automatically when the timeout situation, due to no key activity on the panel in the absence of fire alarm situation, exceeds 25 seconds.

7.2.3 - Warning Window

The warnings are the data types that do not adversely affect critical functions such as fire detection and notification, but are still being used to show that some functions are left disabled or a function performed is valid.

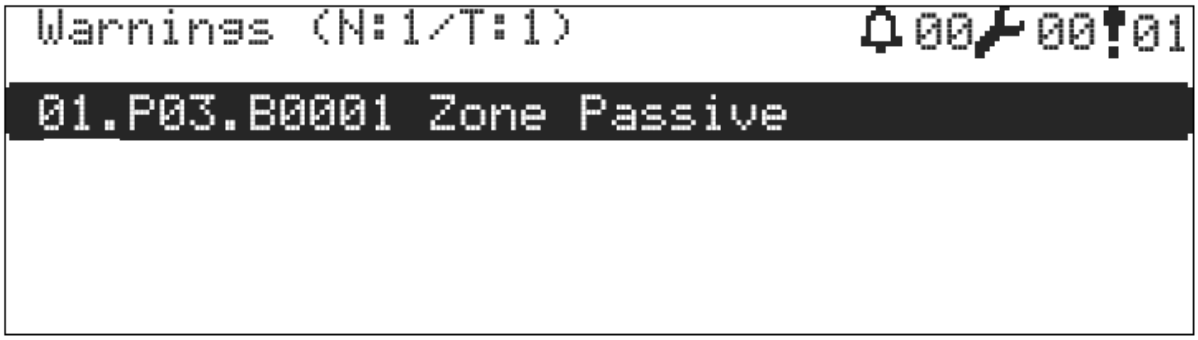


Figure 14 - Warning Window

For more detailed warning description, select a warning from the warning list by using "DOWN" and "UP" keys and press "OK" and thus access the loop address, zone address and location address of the warning as well as the definitions of such locations.

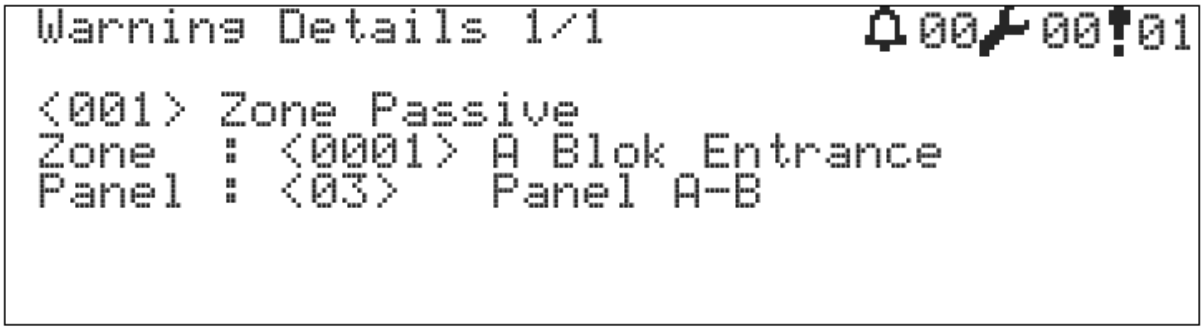


Figure 15 - Warning Detail Window

Warning window is used for the purpose of informing the system user about the existence of the data listed below.

- Disabled devices,
- Disabled zones,
- Disabled outputs,
- Disabled loops,
- Zones under test
- New devices found
- Enabled scenario rules

7.3 - Event Log

Event log is the section in which the events important for Teknim addressable panel are saved and viewed. The records are divided into 10 categories in the event log and each category is evaluated with different events under itself. Records can be deleted with Teknim Addressable Fire Detection System Configuration Software.

The expression "R." which can be seen in event log listings indicates that the event entry is returned from the state (Return)

Table 17 - Event Log Categories

Category	Event
Devices	Alarm Smoke Alarm Temperature Alarm Smoke & Temperature Alarm Button Alarm Input M. Alarm Conventional M. Alarm Gas Alarm Device Not Available Device Configured Data Error Short Circuit Open Circuit Load Error External Power Error Type Error Error Configuration
Loop	Loop Not Available Loop Passive Loop New Devices Loop Short Circuit Loop Open Circuit Loop Init. Loop Configured
Panel	Panel Init. Reset Evacuate Panel Configured System Error Panel Not Available Service Warning
SMPS	Power Supply Not Available Charging Circuit Error
Battery	Battery Not Available Battery High Resistance Battery Empty
Sirens	Short Circuit Open Circuit Configuration
Zone	Configuration
Network	Open Circuit Network Not Available (Lost) Configuration
Inputs	Short Circuit Open Circuit Passive
Scenario	Active
Earth	Low High
User	Active Passive Configuration
Printer	Lost Error Configuration

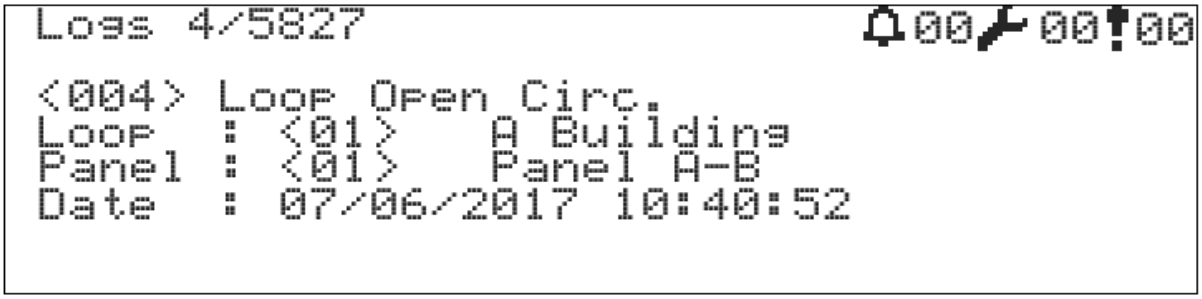


Figure 16 - Case Study memory Window

7.4 - Disable Menu

Disable menu is used to "Disable" devices, zones, siren outputs and loop lines.

7.4.1 - Disabled Devices

Disabled devices continue to communicate with the panel but do not perform the fire detection. When the disabled state is terminated on the device, the fire detection process continues.

To disable any device, switch to at least level 2, then

1 Enter "Menu » Disable » Disabled Devices" menu,
2 Select the desired device from the list and change its status to "PASSIVE",
3 Change its status to "ACTIVE" to re-activate the device.

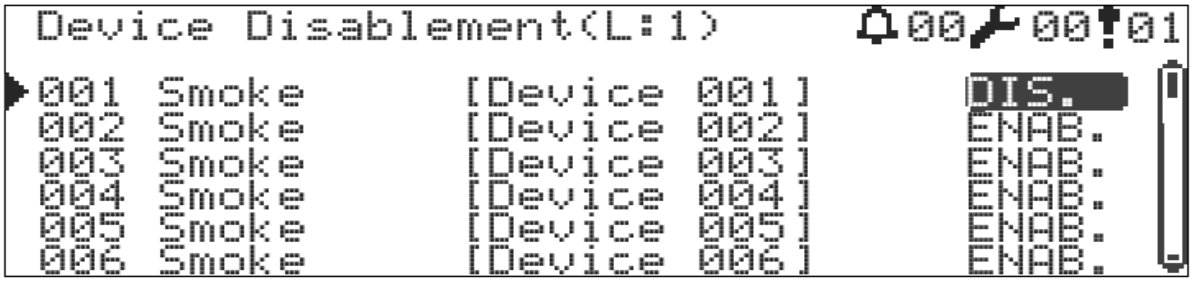


Figure 17 - Disabled Devices Window

7.4.2 - Disabled Zones

The devices within the disabled zones continue to communicate with the panel but do not perform the fire detection. The devices within a disabled zone continue with the fire detection process once the zone is enabled.

To disable any zone, switch to at least level 2, then

1 Enter "Menu » Disable » Disabled Zones" menu,
2 Select the desired zone from the list and change its status to "DISABLED",
3 Change its status to "ACTIVE" to re-activate the zone.

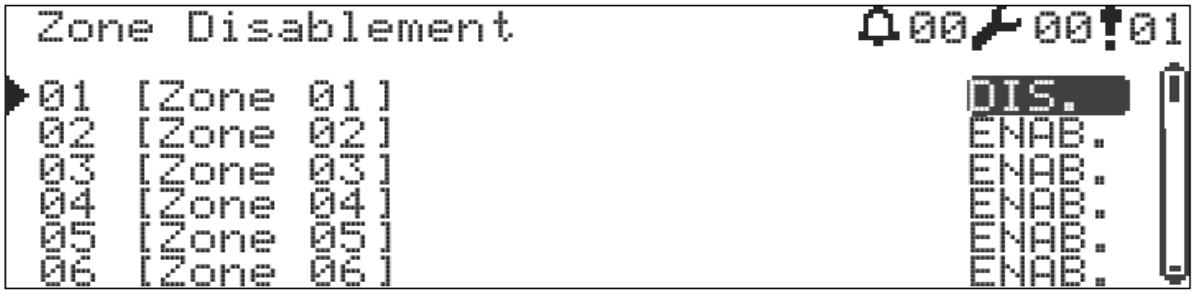


Figure 18 - Disabled Zones

7.4.3 - Disabled Sirens

Disabled siren outputs will not be active in fire and scenario situations. However, the siren outputs continue to be monitored for short circuit and open circuit situations.

- The expression "(N)" next to the outputs refers to normal siren output.
- "(P)" refers to programmable siren output.

To disable any device, switch to at least level 2, then

1 Enter "Menu » Disable » Disabled Outputs" menu,
2 Select the desired output from the list and change its status to "PASSIVE",
3 Change its status to "ACTIVE" to re-activate the outputs.

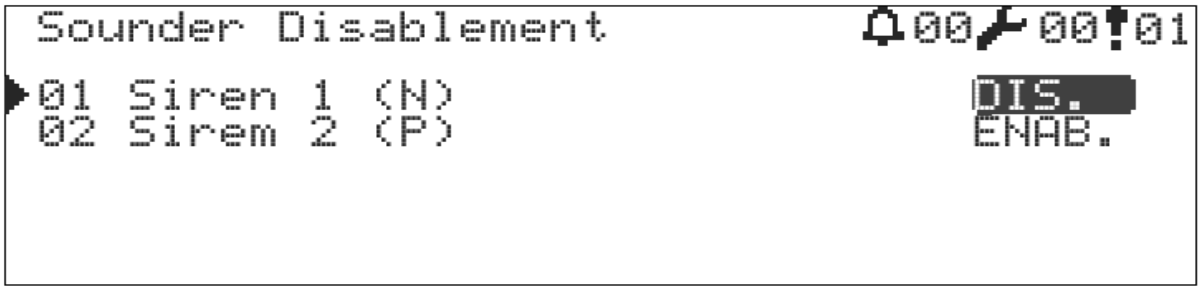


Figure 19 - Disabled Sirens Window

7.4.4 - Disabled Loops

Disabling the loop ensures that all devices connected to the loop are disabled. However, the loop card and the panel main board continue to communicate.

To disable the loop, switch to level 3, then

1 Enter "Menu » Programming » Loop Functions » Loop Parameters" menu,
2 Change the Disabled option to "Yes",
3 Then complete the saving process by pressing "ESC".
4 Change the Disabled option to "No" to re-enable the loop.

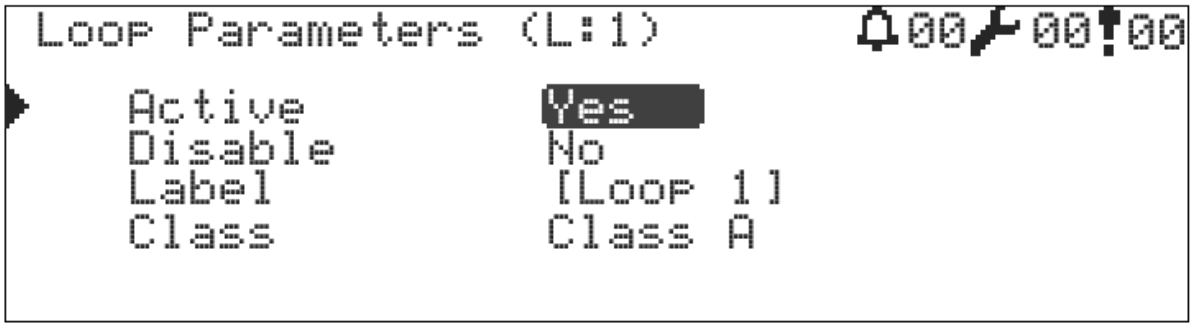


Figure 20 - Loop Parameters

7.5 - Zone Test

Zone test is a feature used to test the alarm functions of fire detection devices. If the settings described in **"6.4.4.9 Sirens in Test State"** and **"6.4.4.10 - Buzzer in Test State"** are made, the sirens or buzzer will sound for 10 seconds for each test alarm zone and then the system will be reset. This time starts again with each new test alarm.

The zone test is gets terminated automatically after 1 hour in case the zone is forgotten in the test state. More than one zone cannot be put into test state at the same time. Smoke detectors in the tested zone ensure a faster response to test smoke or test spray by turning off the algorithm that controls the rejection of temporary signals that prevent false alarms and by reducing the number of verifications.

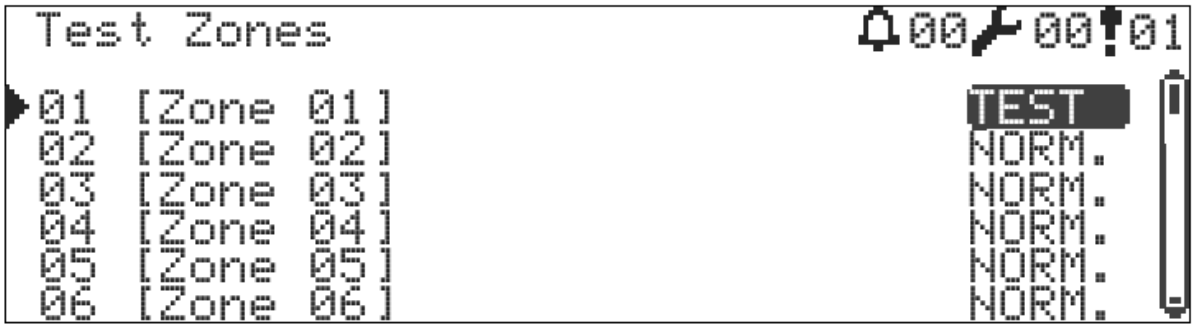


Figure 21 - Zone Test Settings Window

7.6 - Device LED Test

The device LED test is used in cases where the devices need to determine the address/location or for the purpose of checking whether the communication is healthy. The limit of maximum number of LEDs to be lighted can be set with **"6.4.4.7 Maximum Number of LEDs in Alarm State"** All LEDs turn off automatically when the device exits the led test window.

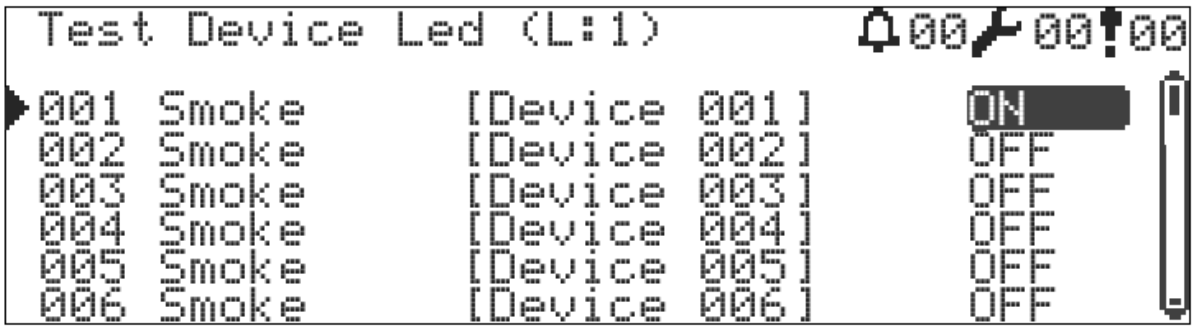


Figure 22 - Device LED Test Window

7.7 - Viewing Technical Service Contact Information

Technical service contact information can be used to notify events that are outside the intervention capacity of the level 2 user when an emergency occurs. Contact information can be accessed only by the level 2 user. These information consists of name of the contact person, company name, company address/web address and telephone number.

Switch to level 2 to view these information, then

1 Enter "Menu » Contact Information" menu.

7.8 - Alarm Counter

The counter keeps the number of alarm conditions that the panel has entered since the first installation.

7.9 - Panel Status

Power supply output voltage, battery voltage, battery/cabinet temperature, siren voltages, versions and serial numbers of the motherboard and LCD cards, panel IP address and port number can be displayed in the panel status window.

7.10 - Loop Functions

All functions related to the loop are grouped under this menu.

7.10.1 - Device List

The devices of to the loop are listed and are used for display purposes only.

7.10.2 - Loop Control

This function is used to locate the disconnections on the loop line. For this:

1 Enter "Menu » Programming » Loop Functions » Loop Control" menu,
2 Press "OK" for making loop control
3 Loop control will scan the entire line and detect the number of devices seen from "Loop Output" and "Loop Input" ends, whereas this procedure takes approximately 20 seconds.
4 Once the detection is performed, a new "In Progress" window will pop up and the de-energized devices in the system will be re-configured during this period. Wait until the configuration ends.
5 The following expression will be displayed on the screen at the end of procedure.

- B: XXX, S: YYY

6 XXX: refers to the number of devices from the beginning of the loop line to the disconnection point.
7 YYY: refers to the number of devices from the end of the loop line to the disconnection point.
8 Thus the disconnection point on the line gets determined.

7.10.3 - Loop Information

Status information of the selected loop, loop input - output voltages, loop current, loop scanning time, categorical numbers of the device types added to the loop and the loop card version, and loop card ID information can be accessed in the loop information window.

7.10.4 - Add Device

1 Enter "Menu » Programming » Loop Functions » Loop Selection » Add Device" menu
2 The number of new devices to be added will be displayed on the screen
If there is no newly added device, 0 will be displayed on the screen; In this case, make sure that the devices are connected to the line and accurately addressed.
3 The number of new devices displayed on the screen must be the same as the number of devices connected to the line. If not, the page must be updated by going to the upper menu and entering the "Add Device" menu again.
4 It is expected for all devices to be configured by pressing "OK"

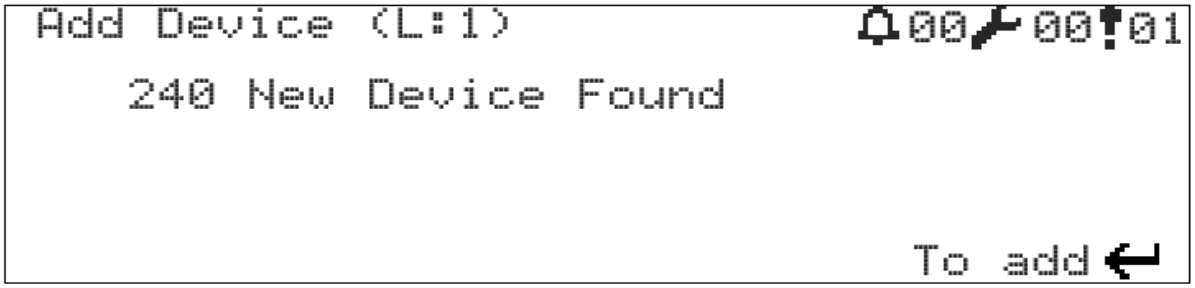


Figure 23 - 2 Adding New Devices on 2-Loop Panel

In order to ensure that the process is completed properly, re-enter the "Add Device" menu and even check whether there is a new device.

To check the accuracy of the added devices, the "Device List" menu can be checked.

This procedure also applies to any new device that will be integrated into the system later on.

7.10.5 - Delete Device

The devices intended to be deleted from the loop must first be removed and generate a loss error. Follow the procedure below to delete a device when this condition is met:

1 Enter "Menu » Programming » Loop Functions » Loop Selection » Delete Device" menu
2 The total number of lost devices must be displayed on the screen
3 If the number of lost devices is not accurate, go back to the previous menu and enter "Delete Device" menu to update the number
4 It is expected for all lost devices to be deleted by pressing "OK"

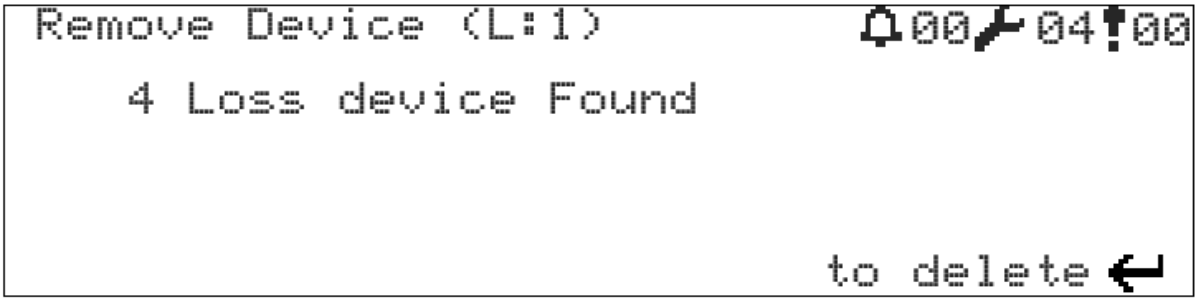


Figure 24 - Delete Device Window

7.10.6 - Loop Parameters

Loop parameters come with the following pre-defined values.

Table 18 - Pre-defined Loop Parameters

Parameter	Value
Tag	Loop [X]
Connection	Class A
Disabled	No
Active	Yes (No on 1-loop panels)

Follow the instructions below for changing the loop parameters:

1 Enter "Menu » Programming » Loop Functions » Loop Selection » Loop Parameters" menu
2 Select "Active" form and change the value to "NO" or "YES"
3 Select "Disabled" form and change the value to "NO" or "YES"
4 Select "Connection" form and change the value to "Class A" or "Class B"
5 Select "Tag" form and write the desired tag
6 As the last step, save the values by pressing "ESC".

Read **"5.8 - Loop Lines"** title for further details about loop connection.

7.10.6.1 - Loop Active Parameter

Loop Active is a parameter that determines whether the loop card will be activated by the main board. If the panel is 1-loop, the active parameter of the second loop comes as "No" by default. The loop active parameter having the default value of "No" ensures that the second loop is not taken into account when the panel is switched on for the first time and in the operations to be applied later. If a second loop card is added to the panel, this parameter must be changed to "Yes" for the loop card to work.

7.10.6.2 - Loop Disabled Parameter

The loop card works in a similar way to the active parameter. Unlike the Active parameter, in case the card is disabled, the panel generates disabled warnings.

7.10.6.3 - Loop Connection Parameter

Loop connection has "Class A" and "Class B" options. Refer to titles **" 5.8.1 - Class A"** and **" 5.8.2 - Class B"** for further information about Class A and Class B.

7.10.6.4 - Loop Tag Parameter

Loop tag parameter is used to create more understandable expressions in the alarm, errors and warnings window. The expression that will be displayed on the screen when a situation related to the loop occurs is the tag defined in this parameter.

7.11 - TdNET Functions

TdNET is a multi-master protocol and communication technology working with Token-Passing topology that provides the network infrastructure of Teknim addressable fire detection systems. A network gets created with up to 16 devices that support the TdNET protocol. **TFC-1208 TdNET Network Card** must be added on the motherboard through the P2 port for TFP-21xx panels to be connected to the network line.

Refer to TFC-1208 TdNET Network Card User Manual for more detailed information about TdNET.

7.11.1 - TdNET Map

TdNET Map lists the control panels that the panel needs to see on the network. If a panel that has been added to the network before can no longer be detected, this situation is displayed on the error screen as "No Panel".

When the TdNET Map is entered, the TdNET list appears on the screen. The panel selected from the list can be added to or removed from the network memory by selecting "ACTIVE" or "PASSIVE".

Follow the instructions below for adding panels to the map:

1 Enter "Menu » Programming » TdNET Functions » TdNET Map" menu
2 Select the desired panel by using Down-Up keys
3 Press "OK" and change the form value to "ACTIVE"
4 Complete the saving operation by pressing "OK" and then "ESC"



Figure 25 - TdNET Map, Only panels 2,3,4 are being monitored

7.11.2 - TdNET Parameters

The general settings of the panel regarding TdNET are made through the TdNET parameters menu. All parameters under this menu are detailed below.

1 TdNET Mode
   a. Independent : Default value. The panel does not send any message to the network line. The panel does not evaluate any message coming over the network. However, the panel continues to listen to devices on the network.
   b. Station : All error, alarm, warning information coming from any zone on the network get evaluated. Each panel selected as a station continuously transmits alarm, error and warning information to the network line without making any further settings.
   c. Main Panel : Same as the station mode. It also sends time synchronization, day/night mode, delay active/passive commands to the network line. There must be only one main panel on the network line.
2 Events Memory : It can be selected as ACTIVE / PASSIVE. It is determined whether the data from the network will be recorded in the event log or not.
3 Time Synchronization : It can be selected as Local / Network. Time-Date setting is provided over the network or by its own local setting.
4 Night/Day Mode : It can be selected as Local / Network. The panel changes the day-night mode according to the commands received over the network, when the Network option is selected.
5 Delays : It can be selected as Local / Network. The panel changes the delay mode according to the commands received over the network, when the Network option is selected.
6 Connection : It can be selected as Class A / Class B. The panel does not evaluate the open circuit faults of the network line and the network line continues to operate as Token-Bus when the Class B option is selected.

7.11.3 - Incoming Commands

Incoming commands are used to determine whether the commands coming from the panels added to the TdNET map must be evaluated. These are "Alarm", "Error", "Warnings", "Reset", "Buzzer Silence", "Siren Silence", "Evacuate" commands. All incoming commands are set to "PASSIVE" by default.

Initially, the panel to be set must be added to the TdNET map for making the incoming commands settings. Then follow the instructions below:

1 Enter "Menu » Programming » TdNET Functions » Incoming Commands" menu
2 Select an active panel from the list and press "OK" to open the commands window.
3 Select "ACTIVE" or "PASSIVE" for "Alarm", "Error", "Warnings", "Reset", "Buzzer Silence", "Siren Silence", "Evacuate" commands
4 As the last step, save the values by pressing "ESC".

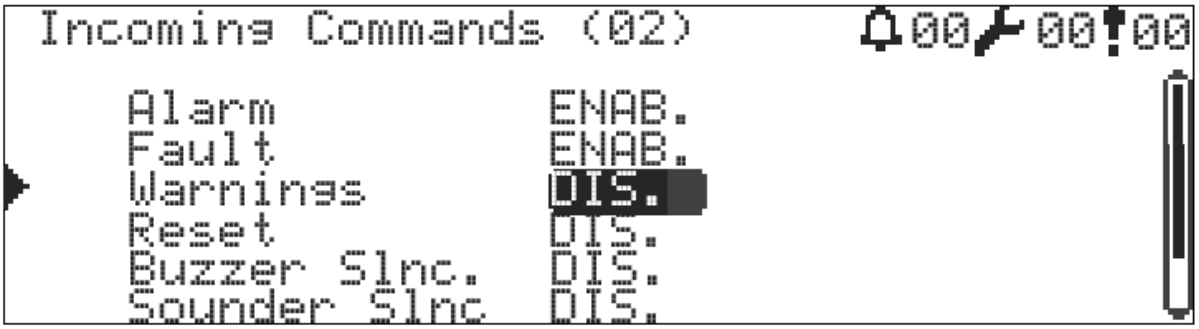


Figure 26 - TdNET Incoming Commands

7.11.4 - Outgoing Commands

By default, all panels in Station and Main panel mode continuously transmit "Alarm", "Error" and "Warning" information to the network line. In addition to this, they optionally transmit "Reset", "Buzzer Silence", "Siren Silence", "Evacuate" commands to the network line. Follow the instructions below for setting these commands:

1 Enter "Menu » Programming » TdNET Functions » Outgoing Commands" menu
2 Select "ACTIVE" or "PASSIVE" for "Reset", "Buzzer Silence", "Siren Silence", "Evacuate" commands
3 As the last step, save the values by pressing "ESC".

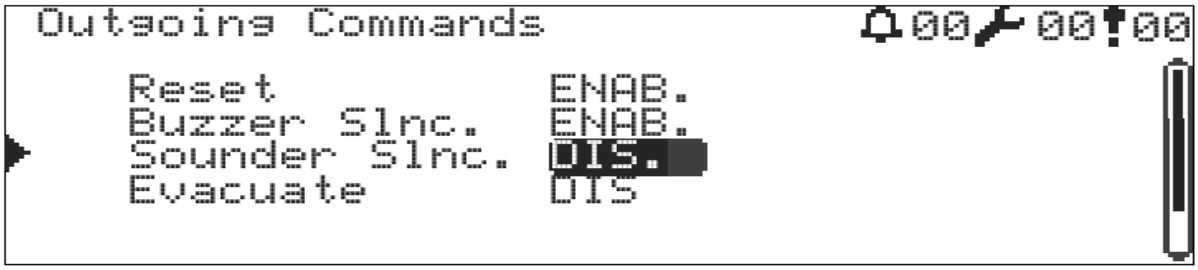


Figure 27 - TdNET Outgoing Commands

7.12 - Users

TFP-21xx panels have 7 users in total. All users can be assigned as Level 2 and Level 3 users and they can be active / passive.

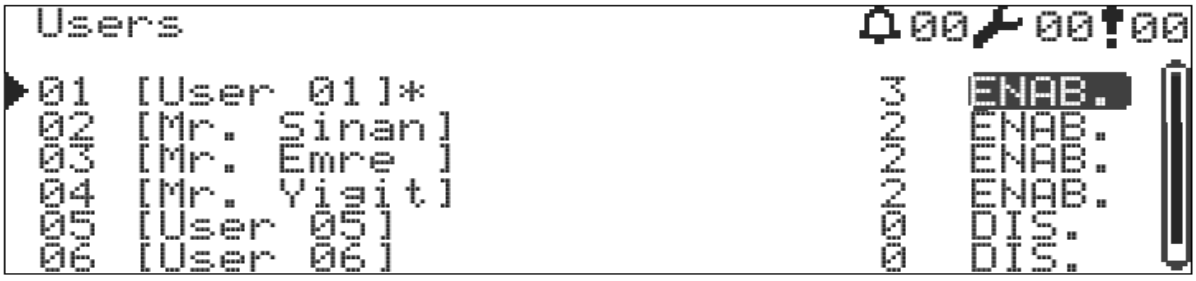


Figure 28 - Users List

In order to program the users:

1 Enter “Menu » Programming » Users” menu
2 Select any user with "OK" button
3 Change the "Status" form to "ACTIVE” in the user programming window that pops up PASSIVE users cannot login to the panel.
4 Change the "tag" form as desired
5 Change the "Level" form to "2" or "3”
6 Define a 4-digit password in the "Password" form
7 As the last step, save the values by pressing “ESC”

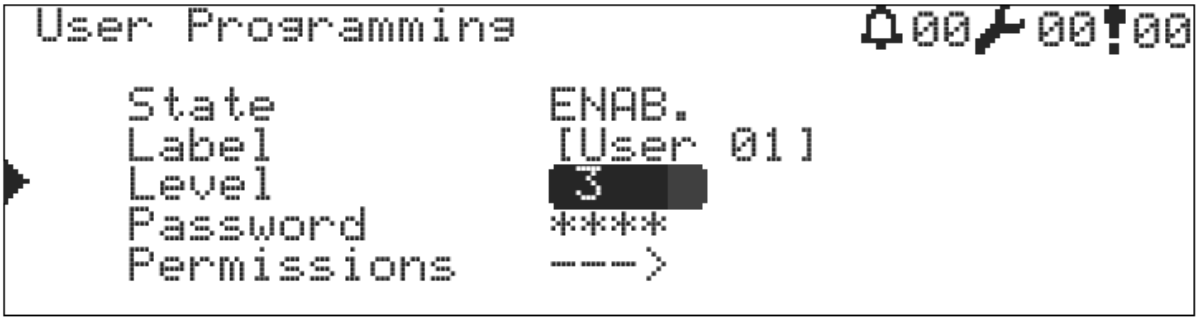


Figure 29 - User Programming Window

7.12.1 - Permissions

Permissions menu is available only for Level 2 users under the "User Programming" window. The "Permissions" line cannot be viewed when a user other than the 2nd level user enters the "User Programming" window.

The menus that the Level 2 users may access and the buttons they may use can be specified under this menu.

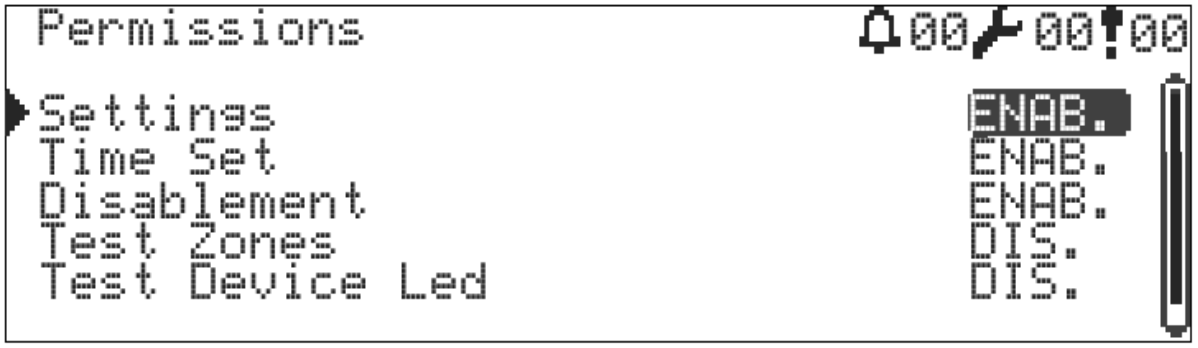


Figure 30 - User Permissions Window

Permissions that can be set for a Level 2 user:

- Settings menu,
- Clock Setting menu,
- Disable menu,
- Zone Test menu,
- Device LED Test menu,
- Device List menu,
- Siren Silence/Repeat button,
- Reset button,
- Evacuate button

7.13 - Printer Functions

Printer functions are available only on TFP-213x series panels. It is used to print panel events instantaneously or afterwards. Default printer functions are "PASSIVE".

To set the printer functions:

1 Enter "Menu » Programming » Printer Functions » Settings" menu
2 Select the "Active" form and change the setting to "Yes" to activate the printer
3 Select the "Language" form and change it to the desired language to set the printing language
4 Select the "Font" form and choose either "Font-A" or "Font-B" to set the font.
5 Select the "Active" form under "Print on every new event log" and change it to "Yes" to print instantaneous logs
6 As the last step, save the values by pressing "ESC".



Figure 31 - Printer Settings Window

Apart from instantaneous events, to print by filtering the events:

1 To print by category:
1.1 Enter "Menu » Programming » Printer Functions » Printing" menu
1.2 Change the value in "Type" form as "Category"
1.3 Change the value in the "Option" form as "Alarm", "Error", "Warning" or "All"
1.4 Use the "Event Type" form to define the event type to be printed by changing the value as "Earth", "System", "User", "Printer", "Device", "Loop", "Panel", "Power Supply", "Battery", "Siren", "Zone", "Output", "Network", "Scenario", "All"
1.5 Change the value in "Time" form as "All" to print all times
1.6 Change the value in "Time" form as "Interval" and then select the "Start" and "End" times to print a specific interval
1.7 Select the "Print" form and press "OK" to start the printing process.
1.8 Select the "Cancel" form and press "OK" to cancel the printing process.
2 To print a single event:
2.1 Change the value in "Type" form as "Single Event"
2.2 Enter the desired event number to be printed in the "Option" form
2.3 Select the "Print" form and press "OK" to start the printing process.

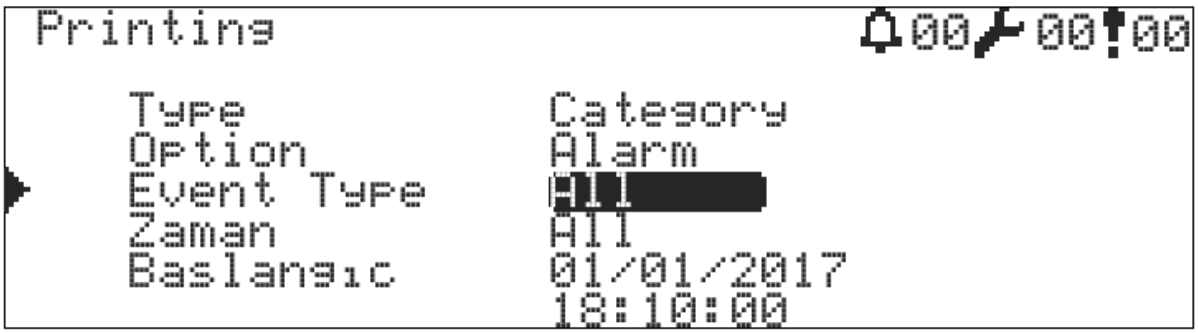


Figure 32 - Printing Window

7.14 - AHM Connection Settings

TFP-21xx Smart addressable panels are capable of connecting to Alarm Information Centers (AHM) and making "Alarm, Error, Warning" notification and event recording.

Fill in the AHM subscriber information you are a member of for the AHM connection to be established. Follow the instructions below to enter AHM subscriber information:

1 Enter "Menu » Programming » Network Settings » AHM Settings" menu
2 Select the "Subscriber Code" form with direction keys and enter the new subscriber code.
3 Select the IP form and enter AHM IP address
4 Select the Port form and enter AHM port
5 Select the Protocol form and chose the protocol according to the need (Usually CID is selected as the form to be used)
6 Select the Active form and change the value to "ACTIVE" to establish AHM communication.
7 As the last step, save the values by pressing "ESC".

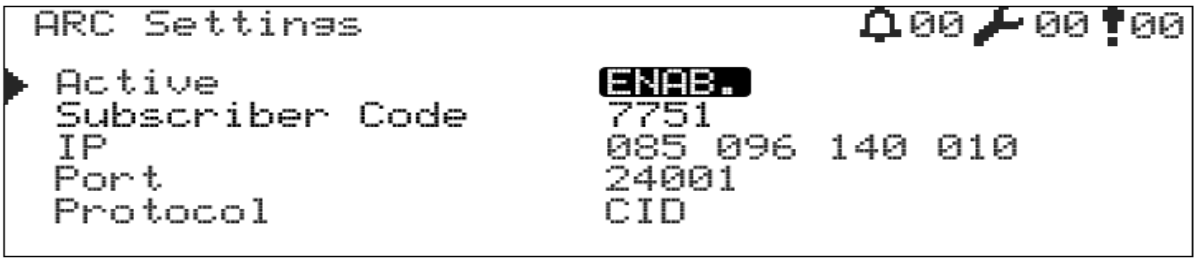


Figure 33 - AHM Settings (Example)

The panel will generate an AHM communication error within 10 seconds if the connection cannot be established for any reason after the settings are made.

For testing the AHM connection and data test, press "Reset" on the panel and check whether the reset information is sent to AHM or not.

7.15 - Service Warning

The panel has a feature for generating a service warning on a specified date.

To set the service time:

8 Enter "Menu » Programming » Service" menu
9 Change the value of the "Service Error" form to "ACTIVE" to activate the service warning. The panel will not generate a service warning if the value of "Service Error" is selected as "PASSIVE".
10 Set the Date and Time forms to the desired time of the service warning
11 As the last step, save the values by pressing "ESC".

The panel starts to generate the service warning 24 hours before the specified time. The service warning appears in the "Errors" window and an audible warning gets generated by the buzzer at the same time.

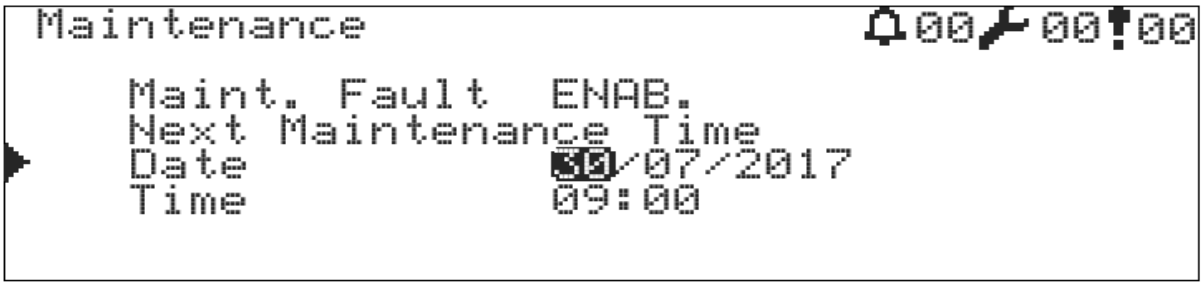


Figure 34 - Service Setting Window

8 - Software Update

Follow the instructions below to upload the firmware file provided by Teknim to the panel:

1 Establish the Ethernet connection between the panel and the computer as described in **"10.3 - Appendix-Computer Connection"**
2 Run "Teknim Updater" software downloaded from www.teknim.com Internet site on your computer
3 Enter the connection information in the Settings menu
4 Set the dip switch positions "CONFIG SW2" on panel main board, respectively as "1: DOWN, 2: UP, 3: UP"
5 Press "CPU RESET" button on the panel main board. Panel "Bootloader" will start
6 Then press "Connect"
7 Press "Browse" and select the latest firmware version downloaded from Teknim Internet site. The devices list will come with all hardware to be updated are selected on in. You may exclude the hardware you do not want to update from the list
8 Press "WRITE" button
9 Do not make any operation on the panel and software until the programming is completed.
10 Once the programming is completed, set the dip switch positions "CONFIG SW2", respectively as "1: DOWN, 2: DOWN, 3: UP"
11 Press "CPU RESET" button on the panel main board. The panel will restart with the installed software.

Attention: Backup the panel configuration data by using the configuration software before starting the panel software update in case of any error that may occur during the update.

Attention: The batteries must be connected to the panel to update the panel software. Otherwise, the panel will not enter into pre-loader mode.

9 - The Situations That Require Maintenance, Repair or Service Intervention

Maintenance and repair works of Teknim Smart Addressed Fire Alarm Systems must be carried out by authorized persons according to the instructions.

In case of any malfunction or in the following situations, contact your authorized service or dealer.

- When the power cable or plug is damaged,
- If any liquid spills or objects fall into the device,
- If the device gets exposed to water or rain,
- If the device is dropped or the housing is damaged
- If there is a notable performance change in the device,
- If the device generates a service warning,
- If the device does not operate normally according to the operating instructions specified in the user manual, call the service since improper operations may cause other malfunctions

WARNING!
Do not attempt to repair the device yourself. You may be exposed to electric shock if you open the housing of the device. In case of any malfunction, contact your dealer or authorized service. Technical intervention to the device must be done by qualified authorized service personnel. The device must be cleaned with a dry cloth. No chemicals must be used on the device.

9.1 - Maintenance and Controls by Users

The users are provided with the maintenance, diagnostic and control mechanisms against some malfunction conditions. These will be explained in the sub-titles.

9.1.1 - Loop Line Open Circuit Error

One of the following reasons may cause the error displayed on the screen as Loop Line Open Circuit:

- Disconnection at any point on the loop line
- Loop output cable not connected
- Loop input cable not connected

The error must be identified accurately in order to resolve the problem.

1. Check that the loop input and output cables are connected correctly. If there is a cable connection error, correct it and observe that the error is not displayed on the screen. If the problem is not resolved, proceed to step 2.
2. Perform a loop check. This function is described under the title **"7.10.2 - Loop Control"**.

9.1.2 - Device Lost Error

One of the following reasons may cause the error displayed on the screen as Device Lost:

- The device has been dismounted.
- Device is broken, not responding to loop query

Go next to the device of which the address value is displayed on the screen and check if it is attached to the base. If it is not attached to the base, mount the device into place according to the instructions. Observe that the error is not being displayed on the screen after a maximum of 20 seconds. If the problem is not resolved, the device is broken. Replace the device.

9.1.3 - Routine Checks

9.1.3.1 - Daily

The authorized person must check the panel daily and make sure that there is no error condition. The green "Energy" and "System On" LEDs on the panel must be lighting.

9.1.3.2 - Weekly

Fire alarm systems must be tested weekly.

Every week, a normally functioning alarm button must be activated and any problems with the panel's fire detection and warning system must be noted.

The tests must be done on the same days of the week and a different alarm button must be used for each test. The results of the tests must be recorded.

Once the test is over, the activated alarm button must be brought into its original state.

Important note: Auxiliary outputs must be isolated from the system before testing the fire alarm system.

9.1.3.3 - 4 Years

TFP-21xx series smart addressable fire detection panels contain 2 dry type leak-proof batteries as a backup power source in case of mains power cut. The average life of these batteries is 4 years. Batteries must be renewed at the end of this period.

10 - Appendixes

The appendixes section is divided into 4 categories, being Mechanical, Electrical, Menu and Level.

10.1 - Appendix-Mechanics

10.1.1 - TFP-211X Panel Mechanic View

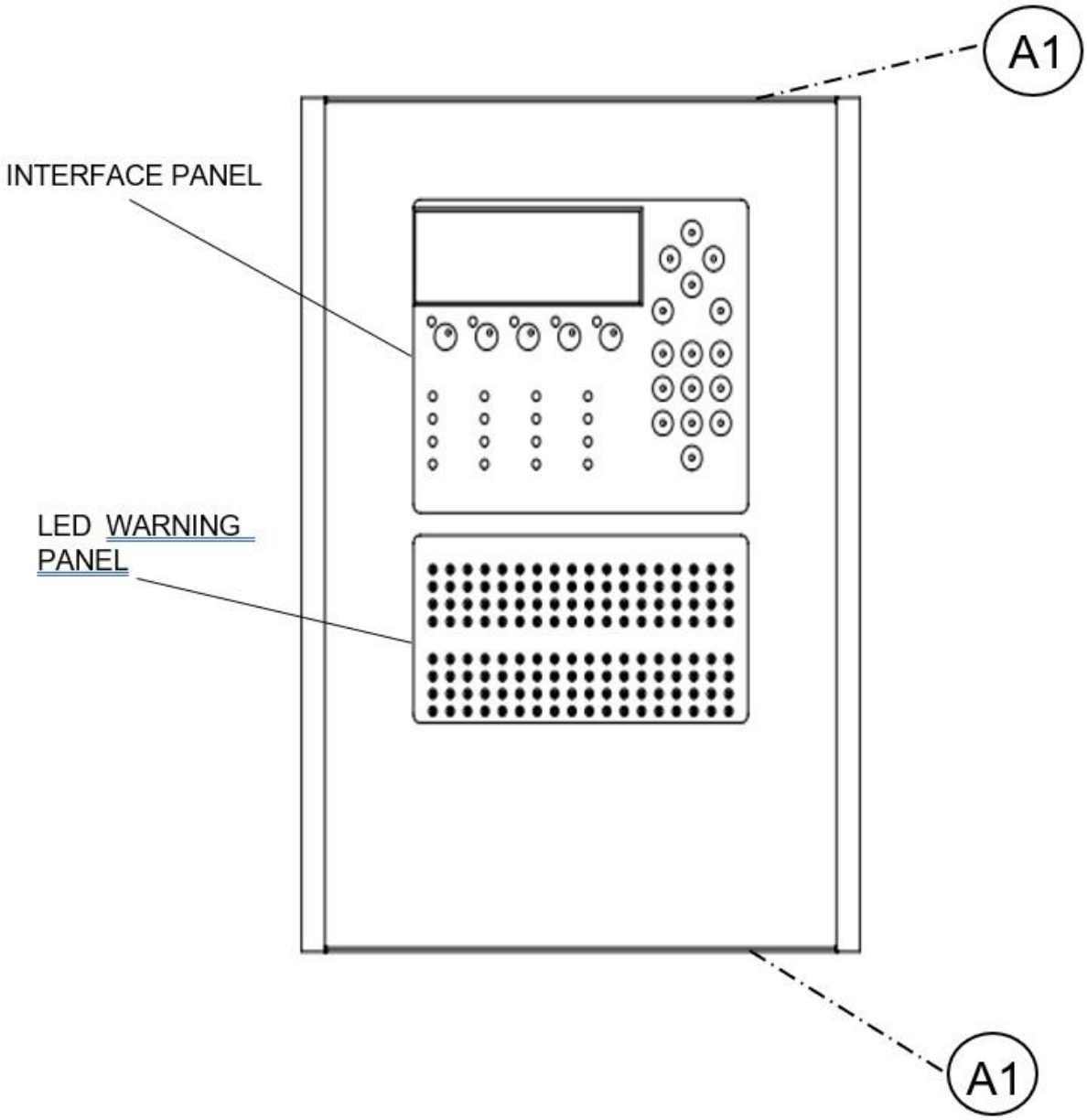


Figure 35 - Panel Front Cover Screws

10.1.2 - Mechanical View of TFP-213X Panel w/o Printer

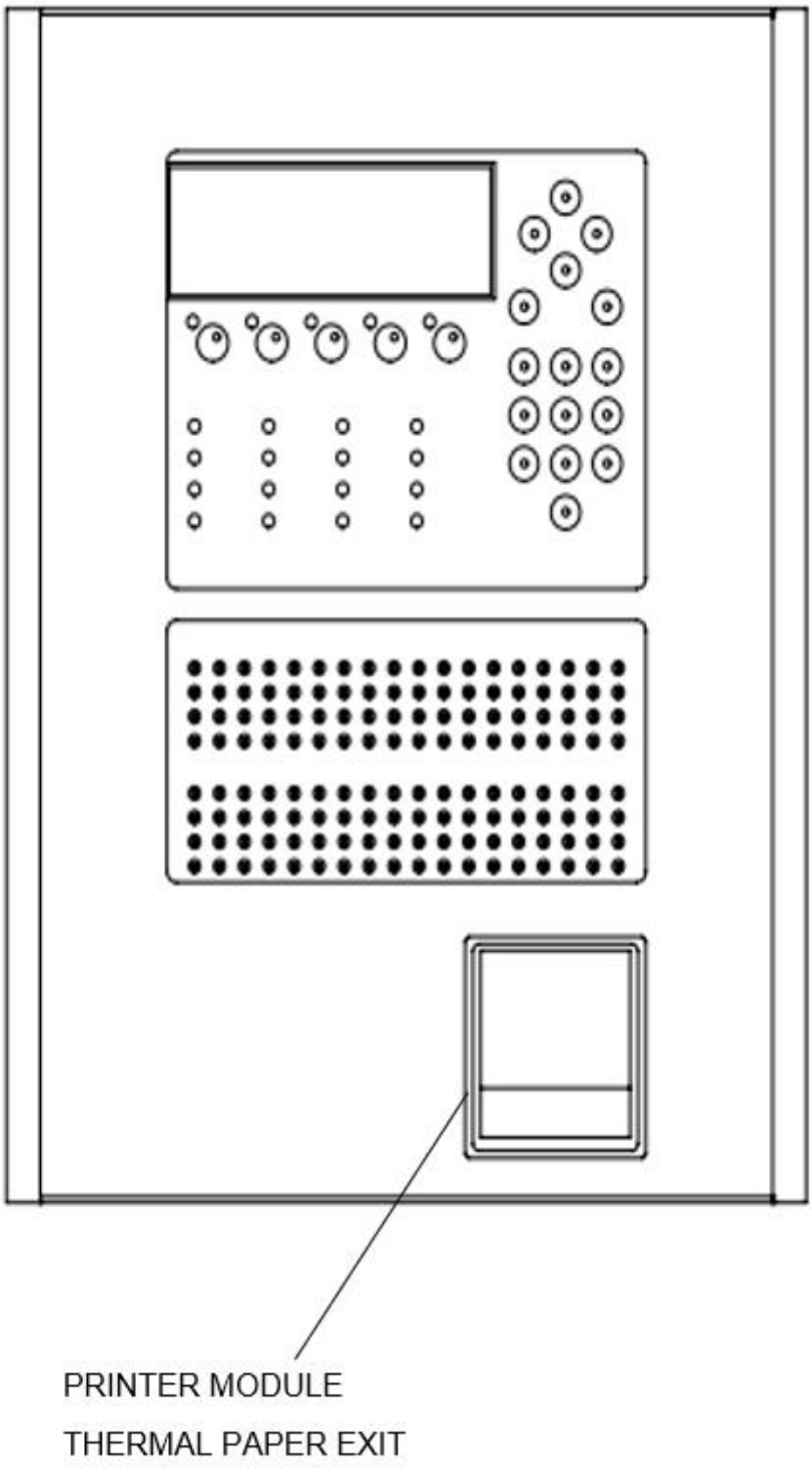


Figure 36 - Printer Module

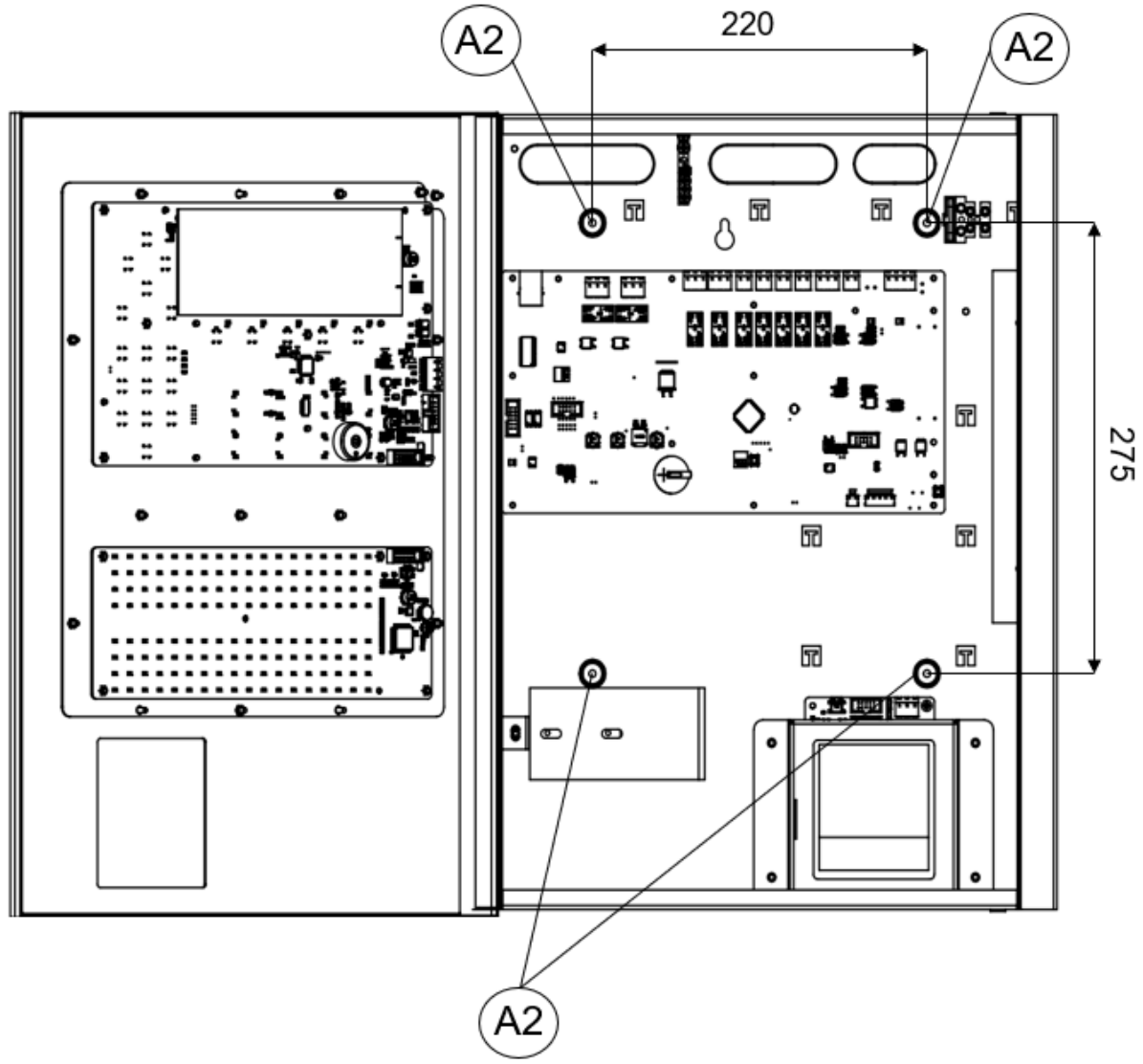


Figure 37 - A2 Mounting Screw Holes

• Detail A2 indicates the panel mounting screw holes.

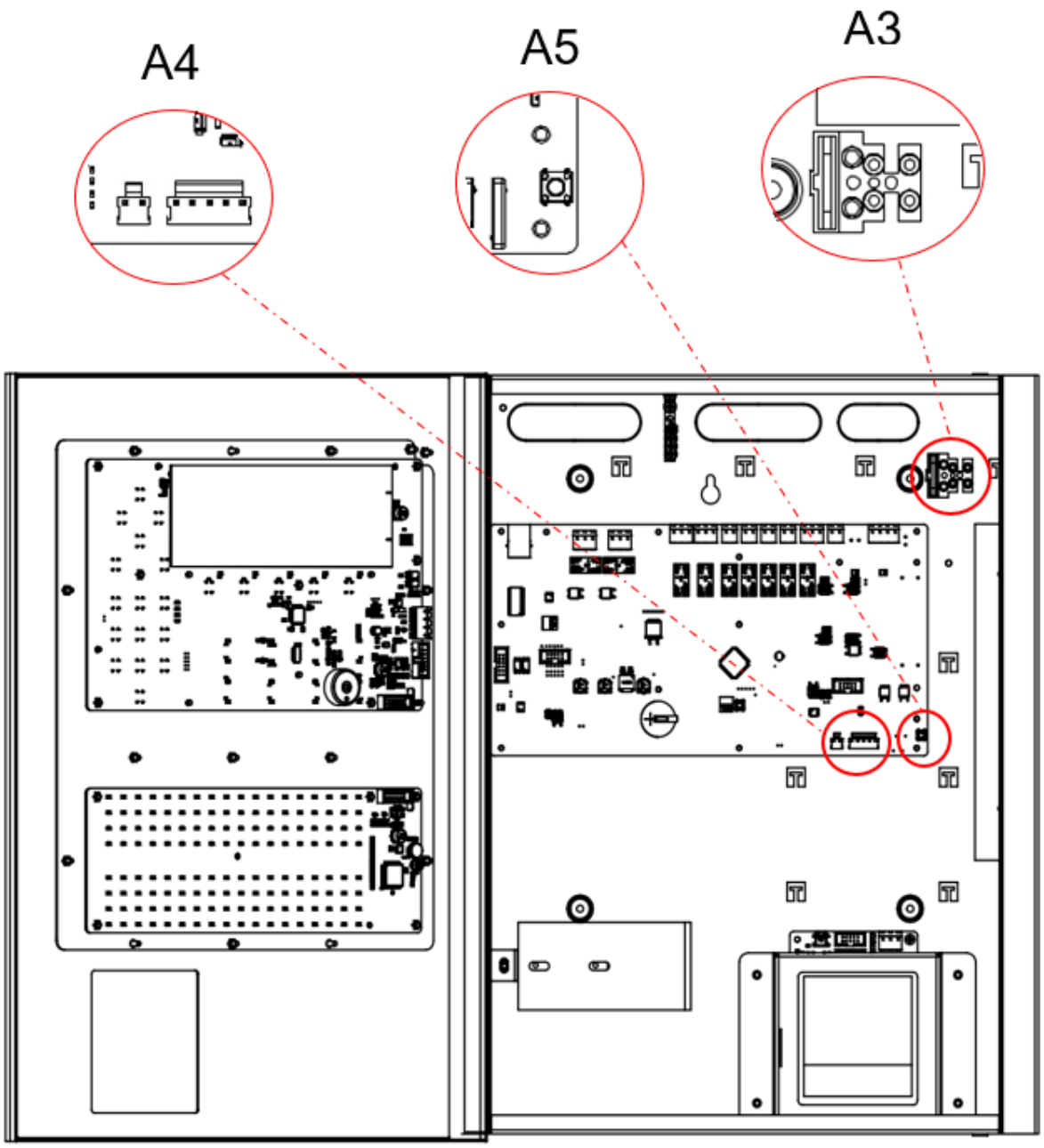


Figure 38 - Electric Connections

- A3 detail is 195~250 VAC 50 Hz input connector.
- A4 detail shows the battery connection (batt) and main card power connection socket.
- A5 detail shows the battery start switch in cases where 195~250 VAC 50 Hz is not present.

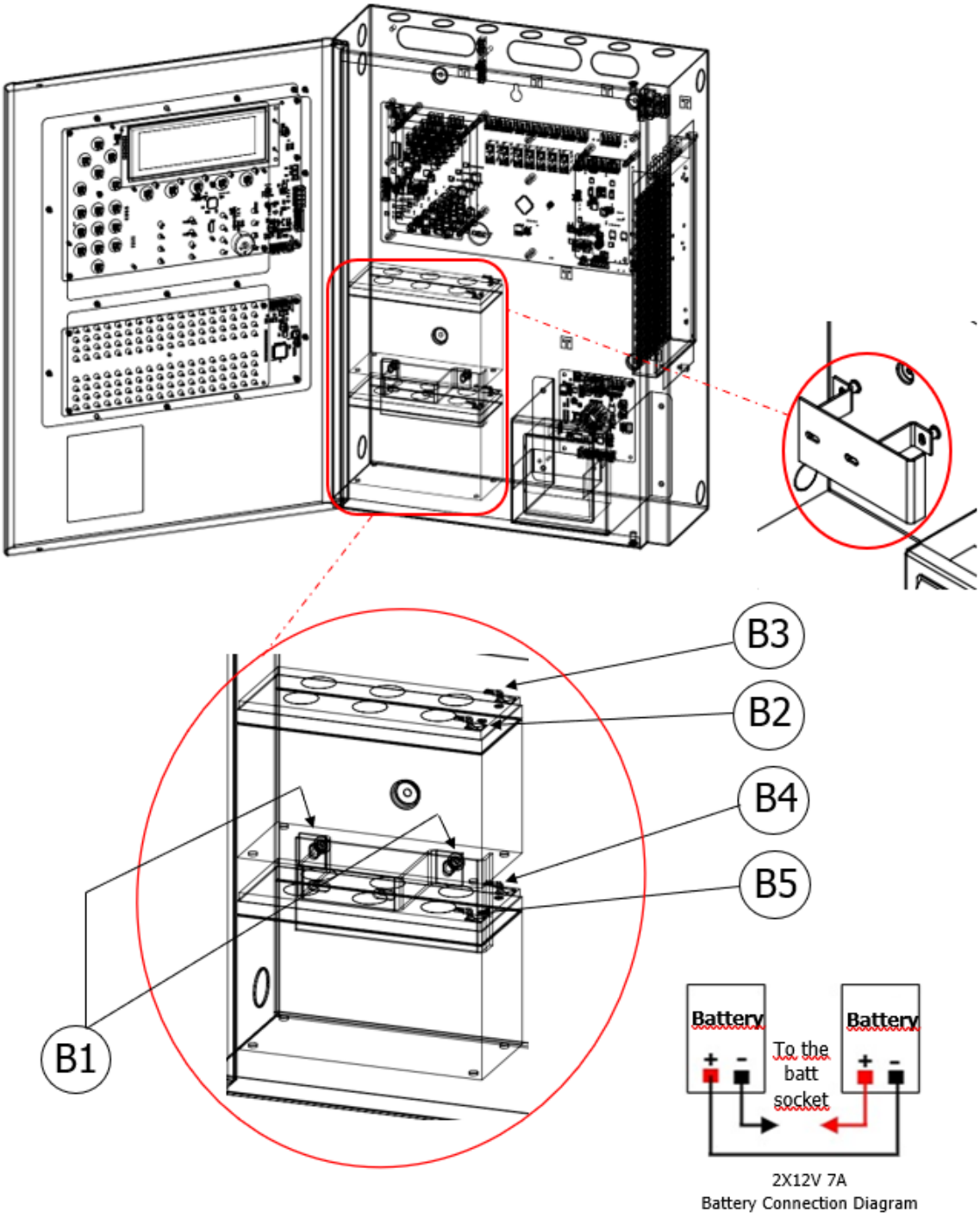


Figure 39 - Panel Battery Connection

- B1 brackets are fixed through the screw points
- B3 and B5 batteries connect to each other via the jumper cable
- B2 and B4 batteries connect to the battery power socket via the power cable

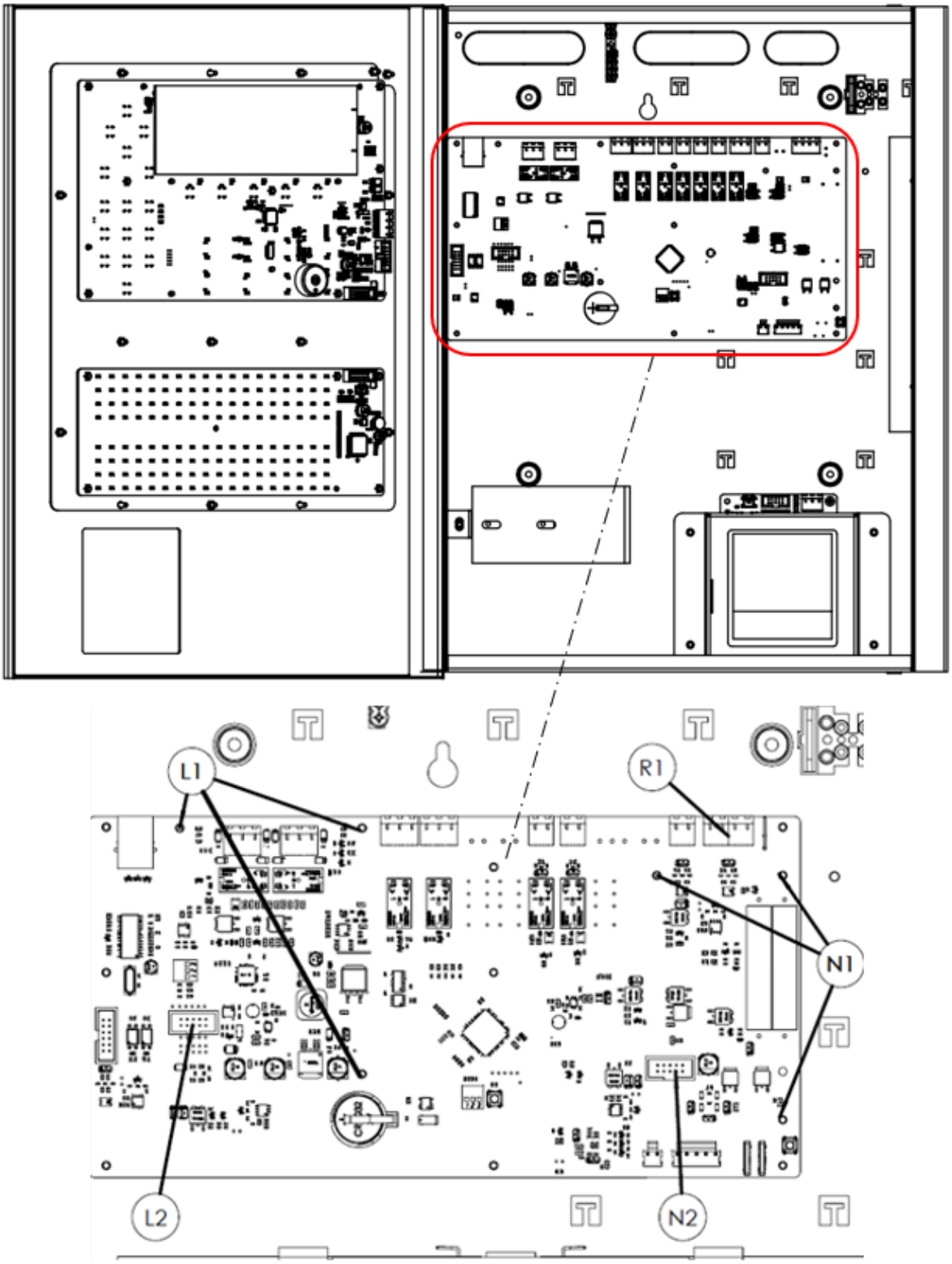


Figure 40 - Loop Card, Network Card and Repeating Panel Connection Points

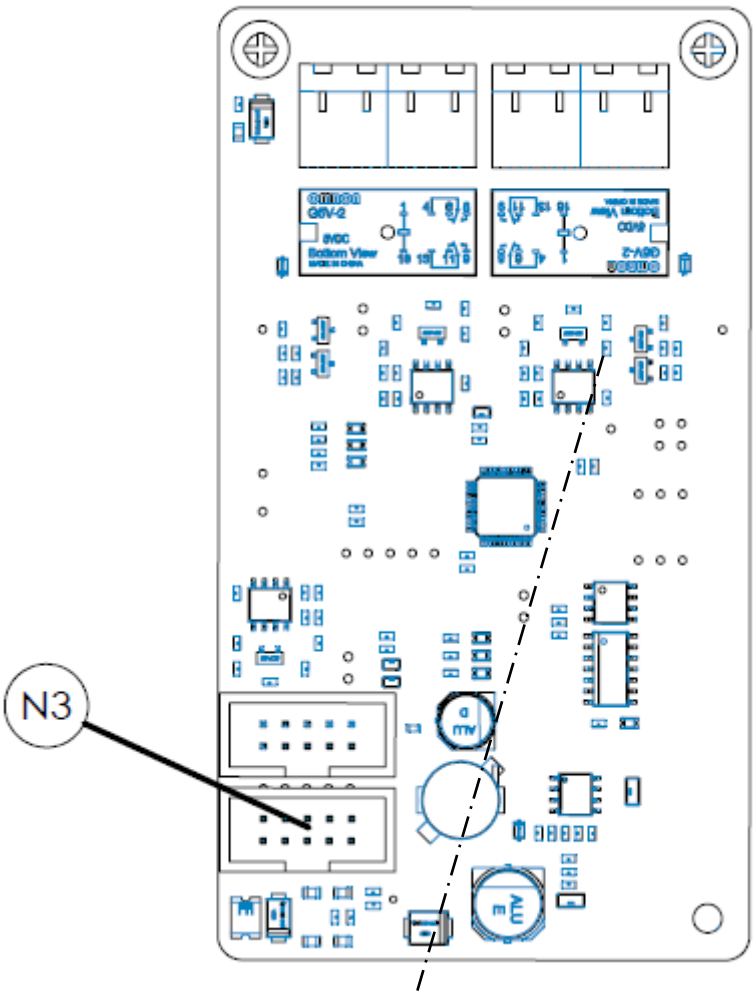


Figure 41 - TFC-1208 Network Card

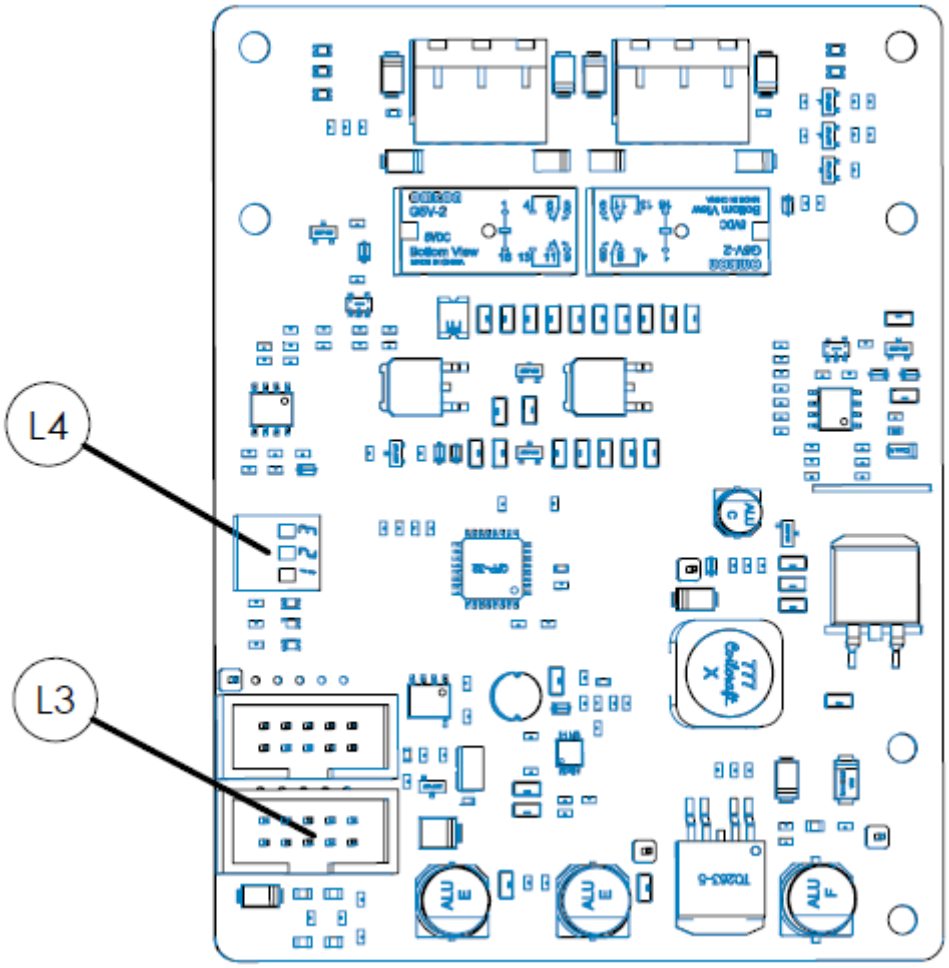


Figure 42 - TFC-1201 Loop Card

10.2 - Appendix-Electrical

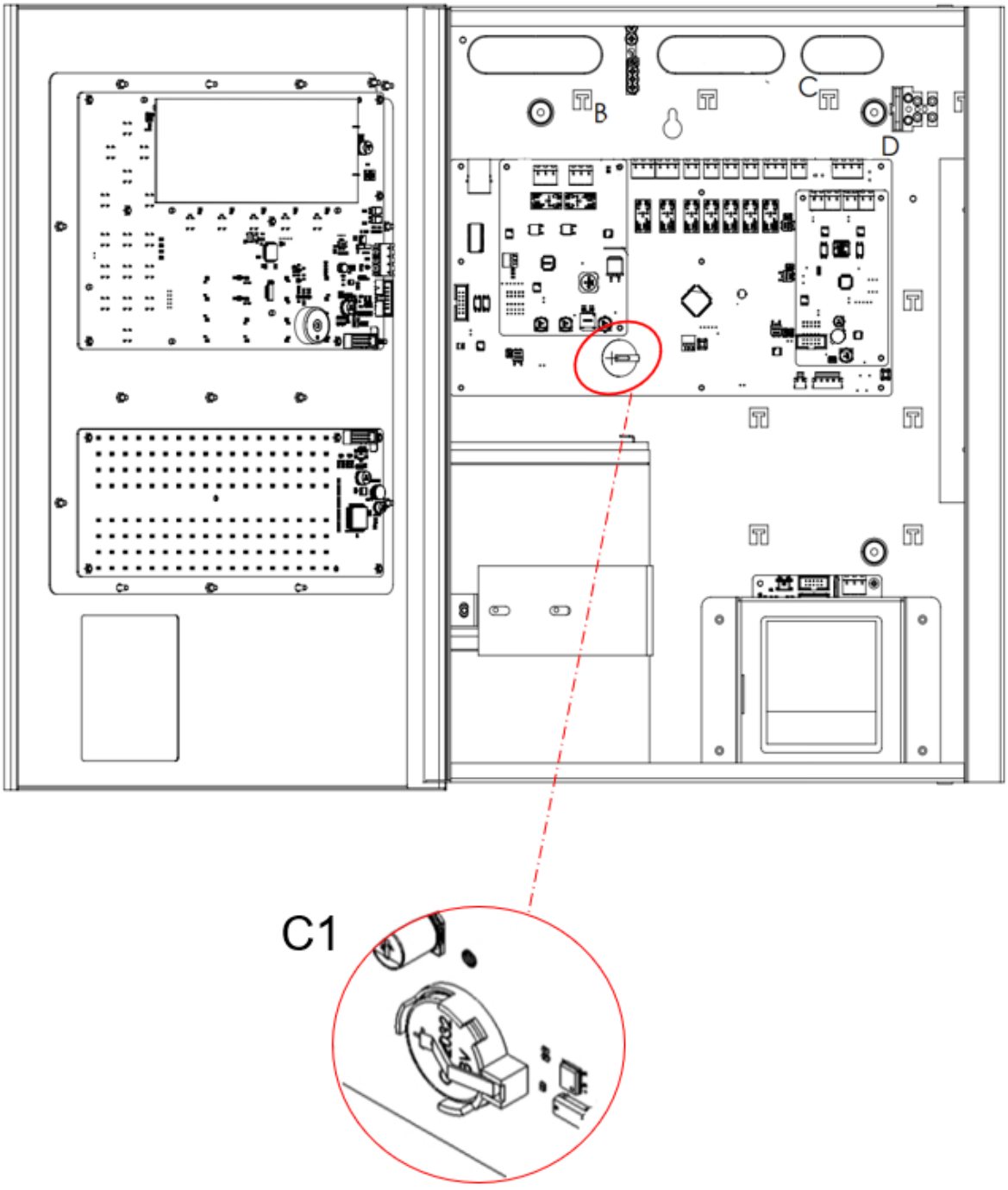


Figure 43 - Panel Button Cell Connection

* Battery connection type may be different.

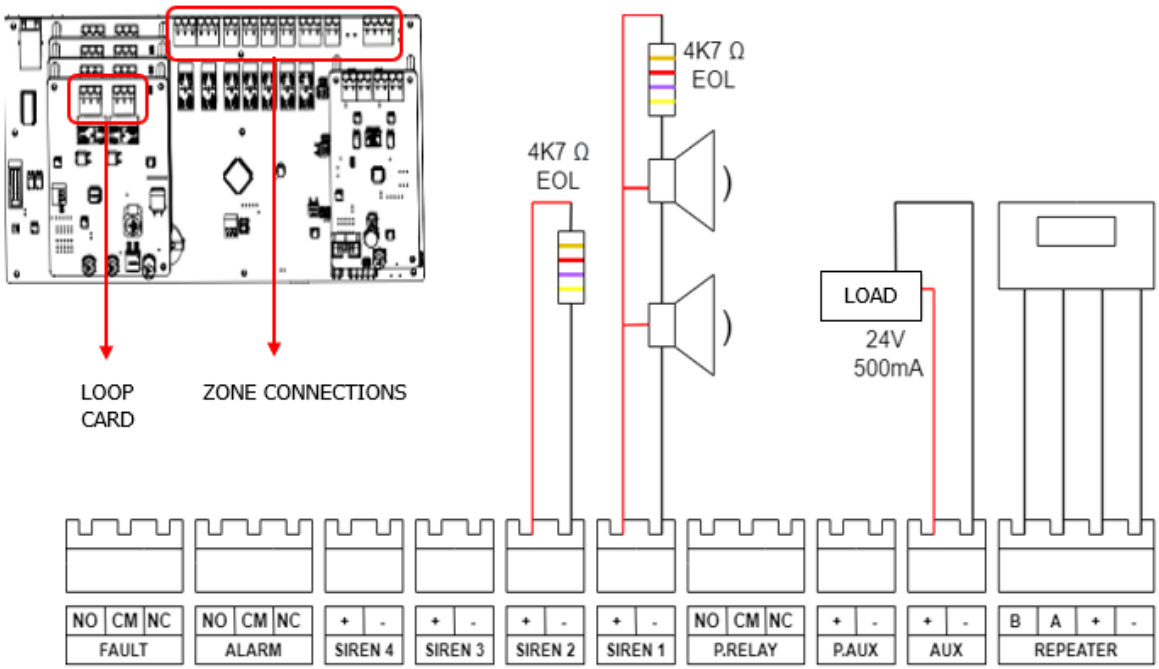


Figure 44 - Siren and Connector Connection

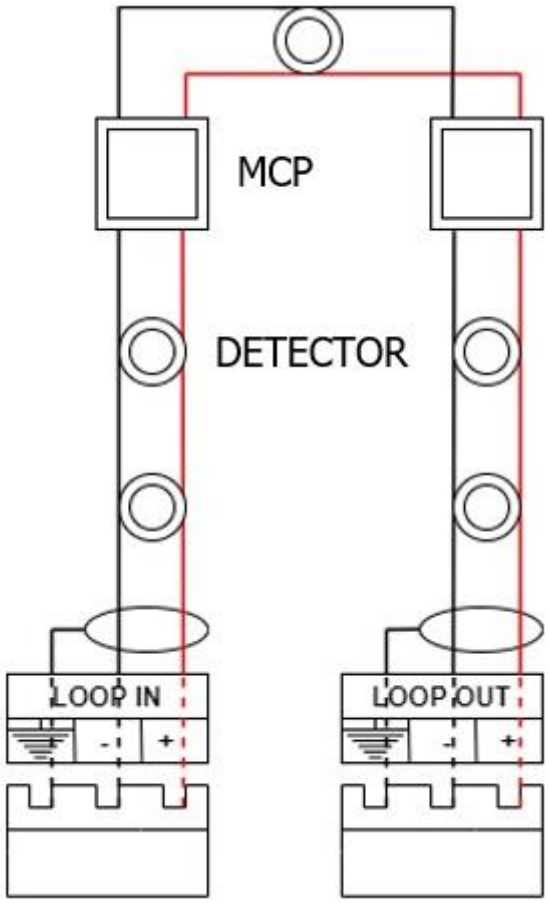


Figure 45 - Loop and Connector Connection

10.3 - Appendix-Computer Connection

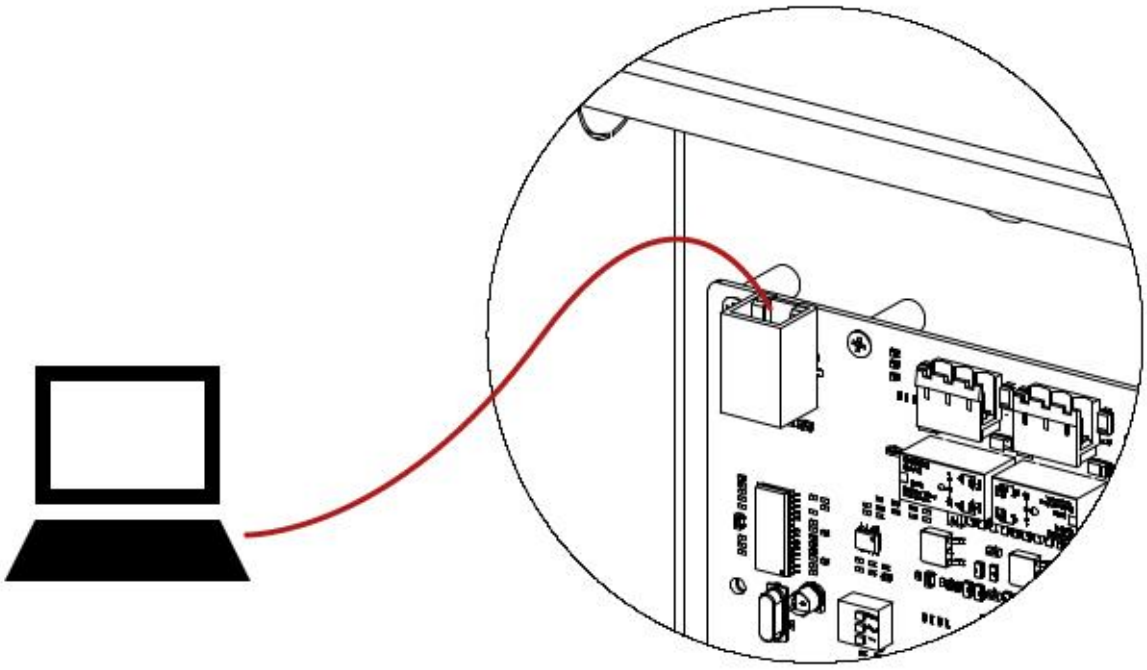


Figure 46 - Computer Ethernet Connection

10.4 - Appendix-EN 54 Standard

TFP-211x and TFP-213x Alarm panels are designed in compliance with EN 54-2 and EN 54-4 standards. In addition, the following EN 54-2 optional functions can be provided.

Table 19 - EN 54-2 Optional Functions

Function	Description
7.8	Output to fire alarm devices
7.11	Delays of outputs
7.13	Alarm counter
8.3	Fault signals received from points
9.5	Disable status of addressable points
10	Test status

CE

1922

Bilgi Elektronik San. ve Tic. A.Ş.

Dudullu Organize Sanayi Bölgesi 1.Cadde İsmet Tarman İş Merkezi

No:1 Daire:32 Ümraniye-İSTANBUL

22
1922-CPR-1857

EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1997/A1:2006

Fire detection and fire alarm systems. Control and indicating equipment.

TFP-2111, TFP-2112, TFP-2114 / TFP-2131, TFP-2132, TFP-2134

Provided Options:

Output to fire alarm devices

Delays of outputs

Alarm counter

Fault signals received from points

Disable status of addressable points

Test Status

EN 54-4:1997, EN 54-4:1997/AC:1999, EN 54-4:1997/A1:2002, EN 54-4:1997/A2:2006

Fire detection and fire alarm systems. Power supply equipment.

TFP-2111, TFP-2112, TFP-2114 / TFP-2131, TFP-2132, TFP-2134

Other technical data: see BİLGİ-TEC-170807-1 and BİLGİ-TEC-170807-2
held by the manufacturer.

10.5 - Appendix-Maintenance Table

Date	Tested Device	Device Location	Description

Date	Tested Device	Device Location	Description

Date	Tested Device	Device Location	Description

11 - Issues to be Considered

11.1 - Maintenance, Repair and Cleaning to be carried out by the Consumer

There are no maintenance or repair that the consumer can perform individually. You may be subjected to electrical shock when you open the cover of the device. The device should be cleaned with a dry cloth. No chemicals should be used.

11.2 - Information on Faulty Usage

Do not allow unauthorized people to open or to change the settings of your device. Otherwise, your device may operate differently than it did originally.

11.3 - Transportation and Shipping

The device should be carried carefully so as not to subject it to any external impacts and to prevent liquid penetration. Malfunctions arising due to improper handling are outside the scope of warranty.

MANUFACTURER AND SERVICE

Bilgi Elektronik Sanayi ve Ticaret A.Ş.

Dudullu Organize Sanayi Bölgesi 1.Cadde İsmet Tarman İş Merkezi No:1 Daire:32 Ümraniye-İSTANBUL

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* 2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

