

## ML-12XX

### MAXLOGIC SERIES INTELLIGENT ADDRESSABLE FIRE ALARM CONTROL PANEL



Maxlogic series intelligent addressable fire alarm control panels are compatible with Mavigard series devices and designed for EN54-2, EN54-4 standards. Maxlogic series fire alarm control panels, offering high performance by the VIP communication protocol, provide 2032 address capacity with its expandable modular structure up to 16 loops. Maxlogic series intelligent analogue addressable fire alarm control panels use advanced microprocessor technology for high level security. LCD with 240x64 adjustable blue backlight indicates fire alarm, fault and other information detail. Panel menu, serigraphy and Loop Manager software have 4 language options as Turkish, English, French and Russian.

Addressable detectors, buttons, loop-powered addressable sounders, interface modules (monitor and control modules) and analogue addressable gas detectors can be programmed, in order to operate in cause-effect scenarios and the fire automation can be built in this manner. Interaction to building management systems with Modbus and Bacnet protocols.

## GENERAL INFORMATION

- Compatible with EN 54-2 and EN-54-4
- User friendly, easy installation and use with aesthetic design
- 4 programmable remote control inputs
- Communication interrupt for fast fire detection in 1.5 sec
- Up to 64 panels and/or repeater panels can be assembled with CAN protocol
- The key is needed for entry to panel menu
- Supervised peripheral devices, extension cards (power supply, loop extensions, printer...)
- Input/Output modules can be connected to panel
- Advanced parametric arrangement options for input/output devices
- 1000 automation scenarios can be created for each panel
- Day and night mode, pre-alarm, contamination warning into a network
- Top priority of fire alarm indication, different buttons for fire and other events, categorical classification due to events
- 1000 event log and programmable zones memory

### ML-125X SERIES PANEL

- Expandable up to 16 loops, max. 2032 address capacity of each panels.
- Optional addition of products such as Network, Printer, Telephone and Announcement Module.

Product Code	Description
ML-1250.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop, Network
ML-1250.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop, Network, Printer, Tel. PA.
ML-1251	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address
ML-1251.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Network, Printer, Tel. PA.
ML-1252	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address
ML-1252.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address, Network, Printer, Tel. PA.
ML-1253	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address
ML-1253.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address, Network, Printer, Tel. PA.
ML-1254	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address
ML-1254.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address, Network, Printer, Tel. PA.
ML-1255	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address

ML-1255.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address, Network, Printer, Tel. PA.
ML-1256	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address
ML-1256.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address, Network, Printer, Tel. PA.
ML-1257	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address
ML-1257.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address, Network, Printer, Tel. PA.
ML-1258	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address
ML-1258.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address, Network, Printer, Tel. PA.
ML-1259	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 9 Loops, 1143 Address
ML-1259.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 9 Loops, 1143 Address, Network, Printer, Tel. PA.
ML-12510	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 10 Loops, 1270 Address
ML-12510.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 10 Loops, 1270 Address, Network, Printer, Tel. PA.
ML-12511	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 11 Loops, 1397 Address
ML-12511.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 11 Loops, 1397 Address, Network, Printer, Tel. PA.
ML-12512	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 12 Loops, 1524 Address
ML-12512.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 12 Loops, 1524 Address, Network, Printer, Tel. PA.
ML-12513	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 13 Loops, 1651 Address
ML-12513.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 13 Loops, 1651 Address, Network, Printer, Tel. PA.
ML-12514	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 14 Loops, 1778 Address
ML-12514.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 14 Loops, 1778 Address, Network, Printer, Tel. PA.
ML-12515	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 15 Loops, 1905 Address
ML-12515.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 15 Loops, 1905 Address, Network, Printer, Tel. PA.
ML-12516	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 16 Loops, 2032 Address
ML-12516.NPTA	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 16 Loops, 2032 Address, Network, Printer, Tel. PA.

### **ML-124X SERIES PANEL**

- Expandable up to 8 loops, max 1016 address capacity of each panels.
- Event logs can be printed instantly or collectively by the printer module

<b>Product Code</b>	<b>Description</b>
ML-1240	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop with printer
ML-1240.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop with printer, Network
ML-1241.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Printer
ML-1241.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Network, Printer
ML-1242.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address, Printer
ML-1242.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address, Network, Printer
ML-1243.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address, Printer
ML-1243.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address, Network, Printer
ML-1244.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address, Printer
ML-1244.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address, Network, Printer
ML-1245.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address, Printer
ML-1245.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address, Network, Printer
ML-1246.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address, Printer
ML-1246.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address, Network, Printer
ML-1247.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address, Printer
ML-1247.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address, Network, Printer
ML-1248.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address, Printer
ML-1248.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address, Network, Printer
ML-1240	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop with printer

ML-1240.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop with printer, Network
ML-1241.P	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Printer
ML-1241.NP	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Network, Printer

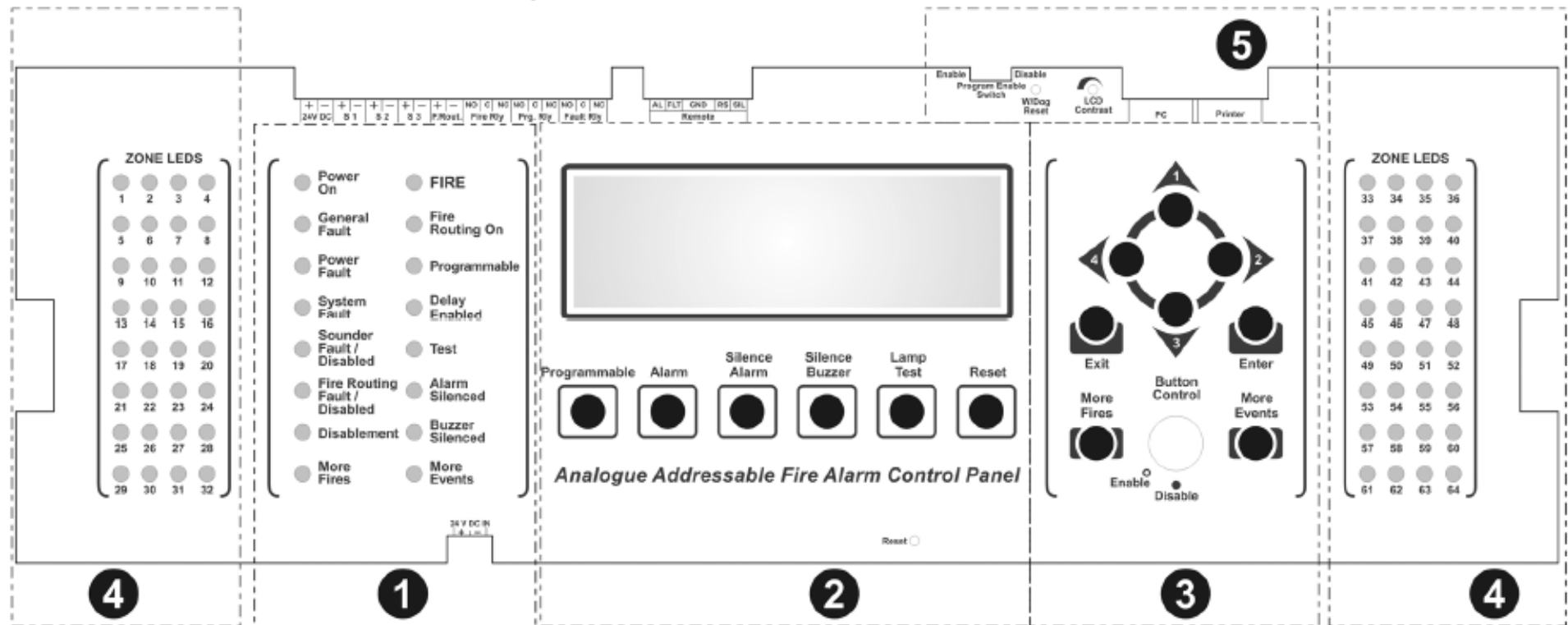
### **ML-123X SERIES PANEL**

- Expandable up to 8 loops, max 1016 address capacity of each panels

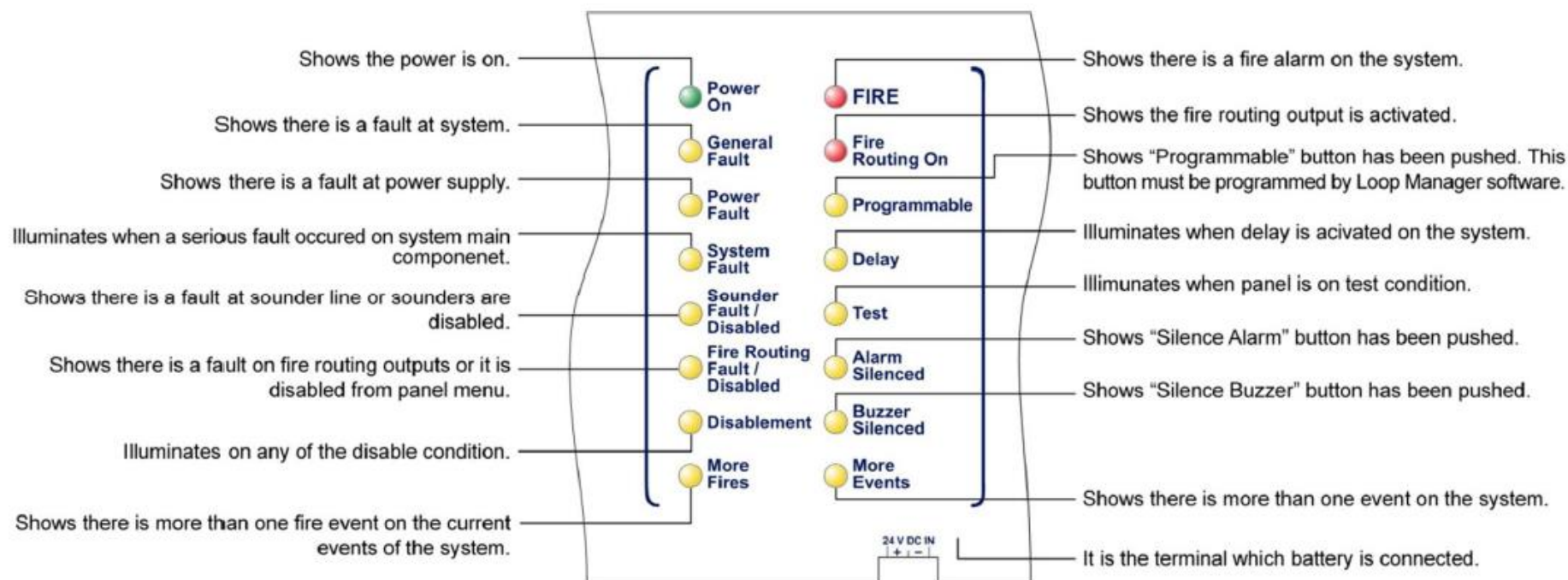
<b>Product Code</b>	<b>Description</b>
ML-1230	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop
ML-1230.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop, Network
ML-1231	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address
ML-1231.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Network
ML-1232	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address
ML-1232.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 2 Loops, 254 Address, Network
ML-1233	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address
ML-1233.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 3 Loops, 381 Address, Network
ML-1234	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address
ML-1234.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 4 Loops, 508 Address, Network
ML-1235	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address
ML-1235.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 5 Loops, 635 Address, Network
ML-1236	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address
ML-1236.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 6 Loops, 762 Address, Network
ML-1237	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address
ML-1237.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 7 Loops, 889 Address, Network
ML-1238	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address
ML-1238.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 8 Loops, 1016 Address, Network

ML-1230	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel,0 Loop
ML-1230.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 0 Loop, Network
ML-1231	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address
ML-1231.N	Maxlogic Intelligent Analogue Addressable System Fire Alarm Control Panel, 1 Loop, 127 Address, Network

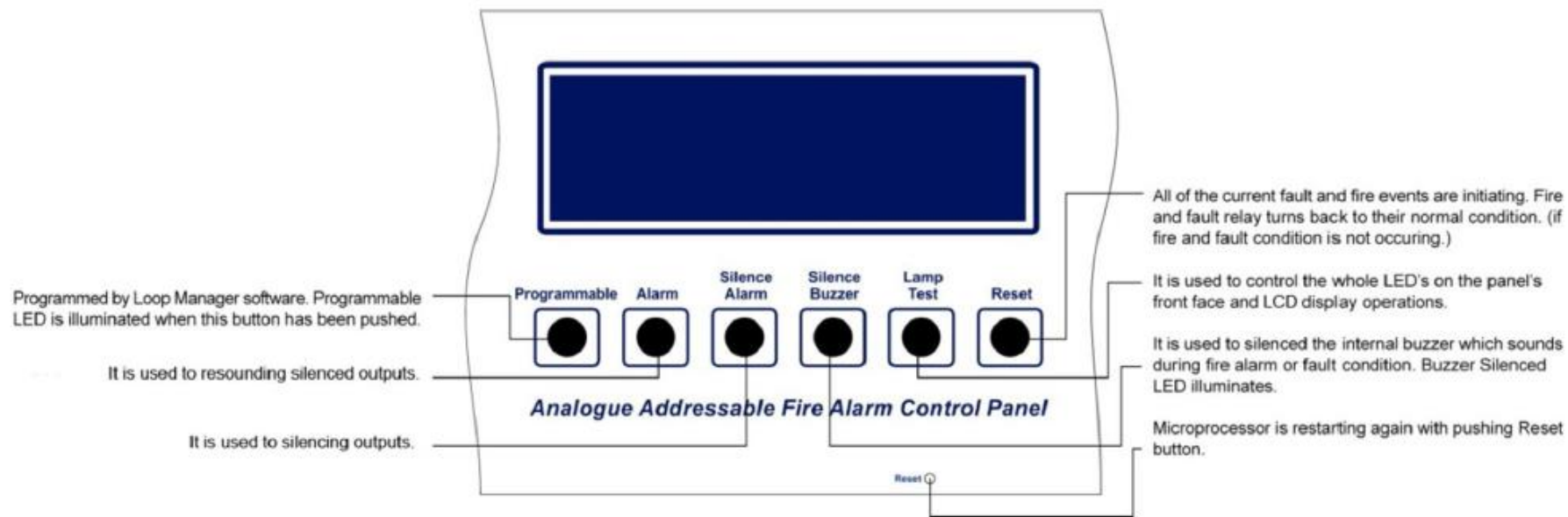
## INDICATORS AND BUTTONS



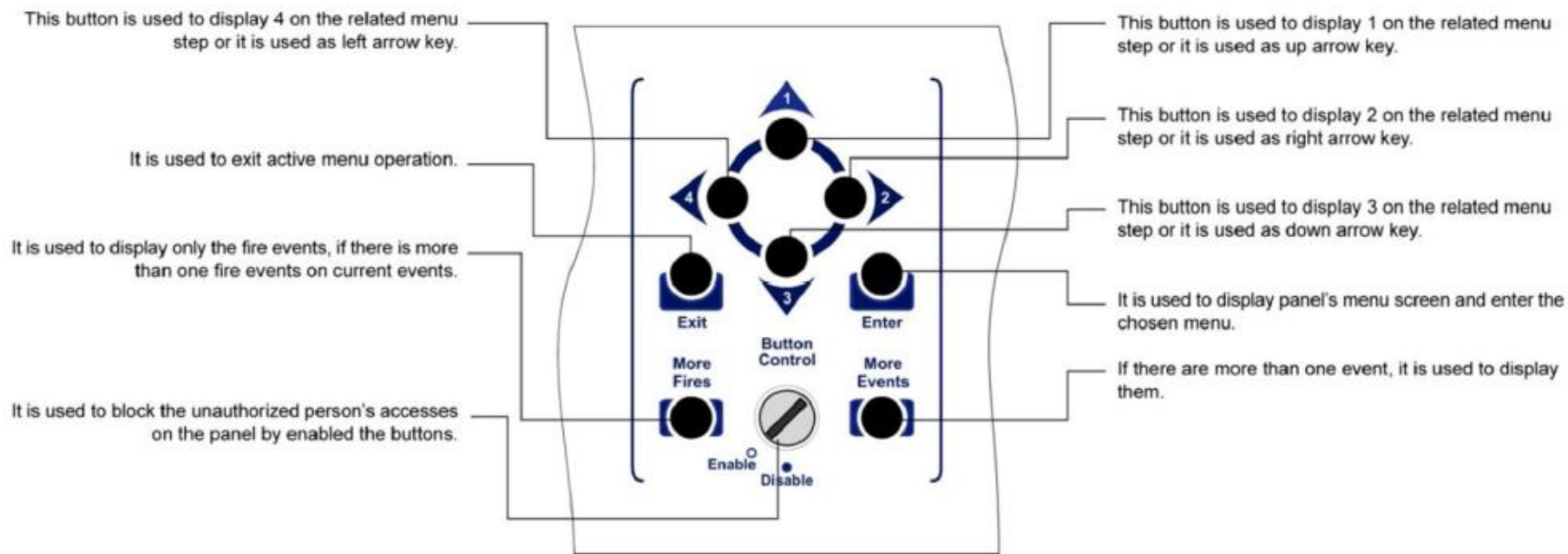
**Fig 1:** Panel front face sections



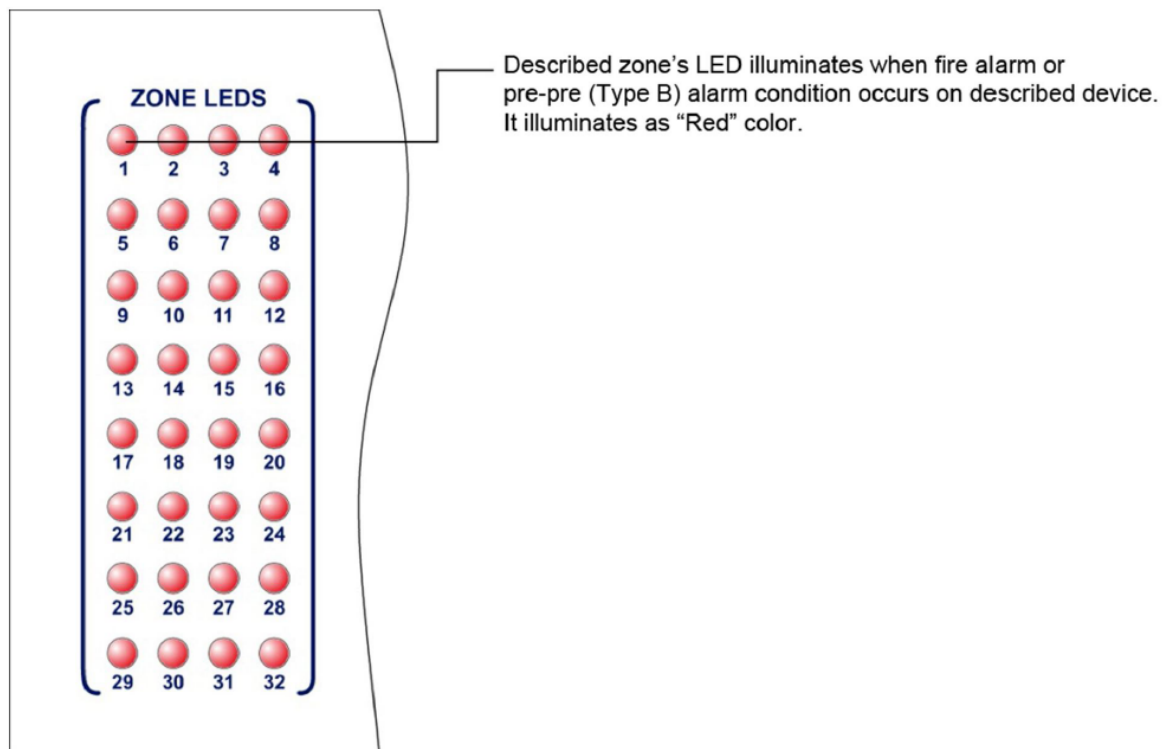
**Fig 2:** Panel front face sections 1 definitions



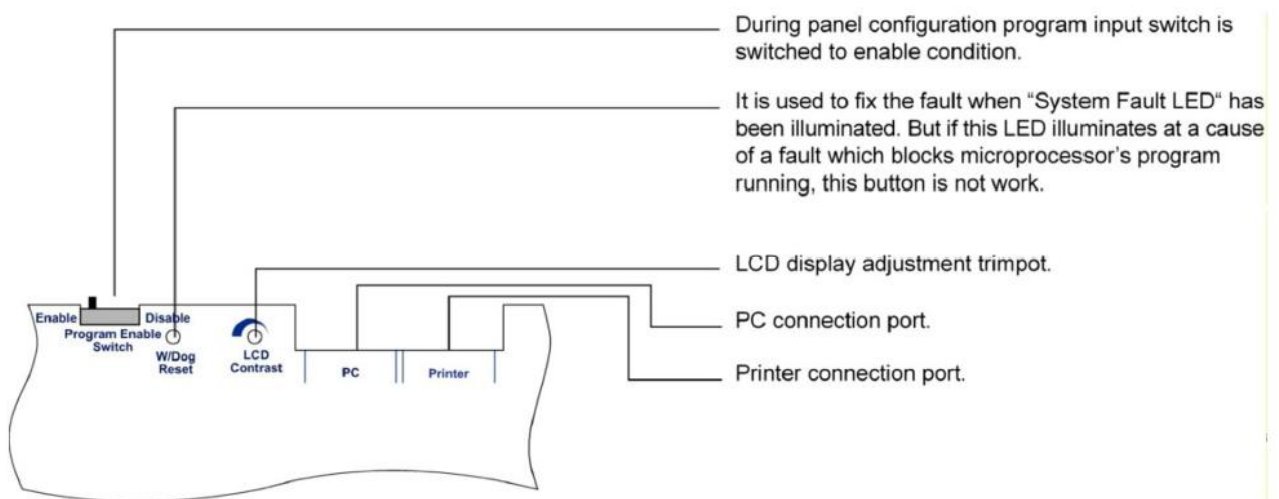
**Fig 3:** Panel front face sections 2 definitions



**Fig 4:** Panel front face section 3 definitions

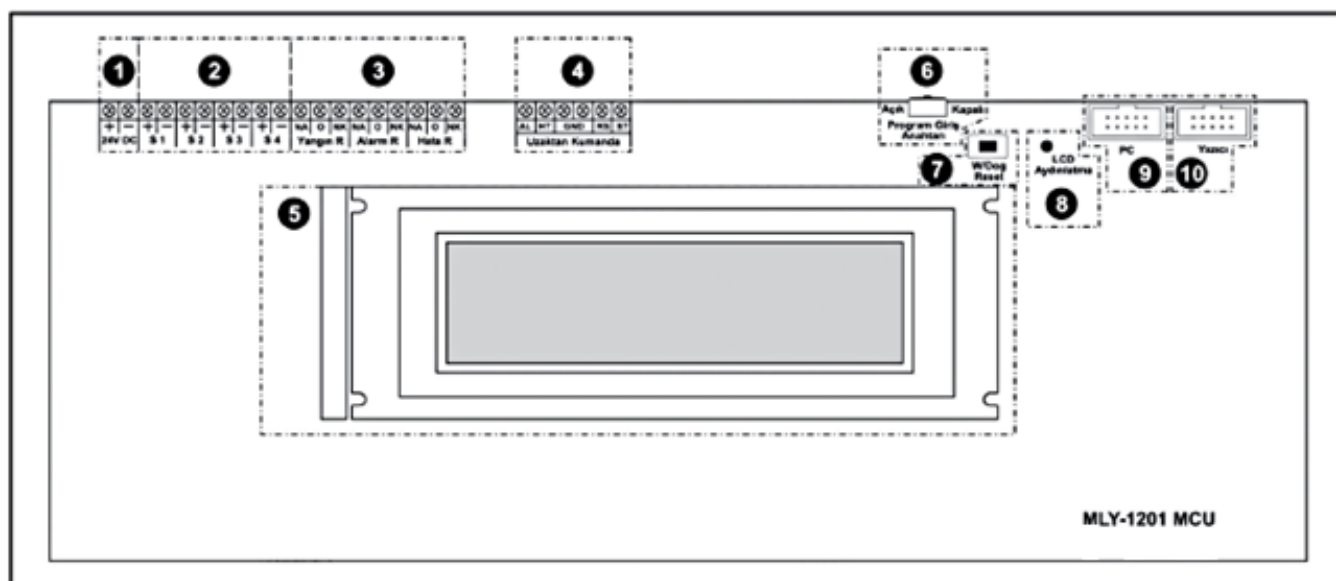


**Fig 5:** Panel front face section 4 definitions



**Fig 6:** Panel front face section 5 definitions

## INPUTS AND OUTPUTS



1. Auxiliary 24V DC supply output for external devices
2. Sounder outputs (4X 500mA)
3. Dry contact relay outputs (Fire, Alarm, Fault Relay)
4. Connection to the remote control inputs
5. 240x64 Graphic LCD screen
6. The program input switch
7. Watch dog reset button
8. LCD lighting trimpot for setting
9. Computer connection socket
10. Printer connection socket

## MECHANICAL AND EXTERNAL ENVIROMENTAL DESCRIPTION

ML-123X Mechanical description	
Height	370 mm
Width	500 mm
Depth	140 mm
Weight (Batt. exc.)	~ 6,7 - 7,75 kg (*)
Construction	1mm DKP
Finish	Epoxy paint
Mounting	Surface, flush mount
Standard color	Grey tone (RAL 7015), white panel frontcase

\* It can be change depends on loop capacity.

<b>ML-124X Mechanical description</b>	
Height	370 mm
Width	500 mm
Depth	140 mm
Weight (Batt. exc.)	~ 8,75 - 9,85 kg (*)
Construction	1mm DKP sac
Finish	Epoxy paint
Mounting	Surface, flush mount
Standard color	Grey tone (RAL 7015), white panel frontcase

\* It can be change depends on loop capacity.

<b>ML-125XX Mechanical description</b>	
Height	800 mm
Width	650 mm
Depth	205 mm
Weight (Batt. exc.)	~ 34,25– 35,70 kg (*)
Construction	Body 1.2mm DKP - Cover 1.5mm DKP
Finish	Epoxy paint
Mounting	Surface
Standard color	Red-white panel frontcase

\* It can be change depends on loop capacity.

<b>ML-12XX Environmental ratings descriptions</b>	
Operating temp. range	(-5°C) - (+50°C)
Operating humidity range	%0-95 (non-condensing)

<b>Power Supply output descriptions</b>	
Power output	150 Watt
Main supply input	230V AC (+10% / -15%) 50 Hz
Load output	20°C'de 27,3V DC (19V min - 30V max) temperature-compensated
Load output fuse	5A 250V Ceramic Type 5x20mm (Littelfuse 0215005.P)
230V AC Fuse	5A 250V Ceramic Type 5x20mm (Littelfuse 0215005.P)
Ripple Factor	1.5 V
Quiescent current in the event of a mains	50mA

failure	
Min. current from the power supply (I <sub>min</sub> )	0,2 A

Battery descriptions	
Battery	2 pcs. 12V DC lead-acid (ML-123X, ML-124X series) 4 pcs. 12V DC lead-acid (ML-125XX series)
Battery capacity	Max. 7Ah
Battery charge output	(-5°C 29V DC) - (+50°C 26, 2V DC) temperature-compensated
Battery charge current	Max. 1100mA
Low battery voltage fault	21±1 Volt
Battery power voltage	19±1 Volt
The output current of the battery is full (I <sub>maxb</sub> )	5 A
The output current of the battery is empty(I <sub>maxa</sub> )	3,9 A
Max. battery impedance (R <sub>imax</sub> )	0,55 Ω
Loop output descriptions	
Max. current	For each loop 200mA
Protection	Protection of short-circuit 500mA
Communication	VIP
Transmission type	semi duplex, 2 wire series synchronous digital communication, time-based transmission, current detection
Data exchange rate	About 1500 bit / sec
The basic source voltage range	18V DC - 24V DC
Bumping the voltage range	27 V DC - 33V DC
Operating current	Digital 0 - loop current + 0 mA Digital 1 - loop current + 37mA
Fault control	Post-parity equivalence
Polling time	9 sec. for each loop
Interrupting response time	Max 3 sec
Max. address quantity of a loop	127
Max. zone quantity	64 LED indicators, As a software, up to 1000 zones can be defined.
Output description	
Sounder outputs	4x (24V DC 500 mA), programmable, supervise, automatic fuse protection, 10 KΩ end of line resistor.
The cable specifications for sounder outputs	Should be able to carry 500mA

Fire alarm relay	30V DC 1A dry contact, programmable
Alarm Relay	30V DC 1A dry contact, programmable
Fault relay	30V DC 1A dry contact, programmable
Auxiliary 24V output	24V DC 500 mA automatic fuse protection
The cable specifications for auxiliary 24V output	Should be able to carry 500mA

Network output descriptions	
Nodes quantity	64
Max. Network cable distance	1200m
Communication protocol	CAN / 20000 baud
Cable type	Cat6 FTP

Cable descriptions	
Sounder cable	2x1,5 LIHH FE 180
Loop cable	1x2x0.8+0.8JH(st)H / 1x2x1.5+1.5JH (st) H