

Marine Type Fire Alarm Control Systems

generating confidence

maxlogic & mavigard
fire and gas detection systems





M I S S I O N
M A N U F A C T U R I N G
I N N O V A T I O N
C O N F I D E N C E
D E V E L O P M E N T
Q U A L I T Y



Mavili Elektronik is a global leader in intelligent addressable, conventional fire and gas detection, alarm and control systems. Its products are protecting various sites in over 60 countries worldwide.

Mavili Elektronik's range of intelligent addressable alarm systems is widely specified for installations from single loop, single panel to a wider, multi-loop network with about 130,000 devices like smoke, heat, multisensor detectors, I/O modules, manual call points, sounders and sounder/beacons.

Mavili Elektronik also manufactures extinguishant systems, smoke beam detectors, gas detectors, accessories for fire and gas detection systems and Marine Type fire alarm systems.

Moreover there were designed a special Supervisor software for monitoring and control of the addressable fire alarm systems remotely through TCP/IP.

The company has 7 offices in Turkey and Russian central office in Moscow. Products are manufactured in Turkey according to the strictest quality standards.

The products have certificates from various organisations such as: Turkish Loyd, Russian Maritime Register of Shipping, LPCB, Russian Technical Reglament, TSE and many others. Mavili Elektronik always provides pre-sales and after sales support for its customers and distributors.

mavili
ELEKTRONİK TİCARET VE SANAYİ A.Ş.

Our Mission

Being a "high technology" company which is respectful to society, environment, ethical values; which researches, learns and improves itself continuously; which realizes the market realities and gets the right decisions.

Our Vision

Effective and professional global manufacturing of high technology products.

Our Marine Type Systems in International Waters...

LOYD Certified Marine Type Fire Alarm Control System

All marine products have, **IACS** (International Association of Classification Societies Ltd.) member **"Russian Maritime Register of Shipping"** type approval certificate and **TURK LLOYD** (SOLAS 74 and FSS).

Intelligent Addressable System Features

- ▶ Modular structure from 1 loop to 8 loops
- ▶ Model option with thermal printer
- ▶ Microprocessor controlled
- ▶ 1000 event log memory
- ▶ Loop polling in 7.5 sec
- ▶ Communication interrupt for fast fire alarm detection in 1.5 sec
- ▶ Up to 1000 cause-effect scenarios can be created for each panel

Conventional System Features

- ▶ 2, 4, 8 and 16 zone capacity
- ▶ Microprocessor controlled
- ▶ Stable sensitivity
- ▶ PCB protection against to humidity and corrosion

Fire Extinguishant Control Panel

- ▶ 4 detection zones, 1 extinguishant zone
- ▶ Extinguishant-related front panel LEDs and LCD screen provide full system information
- ▶ Delay and extinguishant time can be adjusted
- ▶ Solenoid valve or actuator can be connected to the extinguishing output

* IACS Member Classification Societies





Perfect Design
with Modular
Structure...

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Intelligent Addressable Fire Alarm Panels

Maxlogic series intelligent addressable fire alarm control panels which have aesthetic design and user friendly features, offering high performance by the VIP communication protocol.



ML-1248.P/M
Fire Alarm Control Panel

- ▶ Compatible with EN 54-2 and EN 54-4
- ▶ Expandable up to 8 loops, max. 1016 addresses capacity for each panel.
- ▶ Event logs can be printed instantly or collectively by the printer module.



ML-1238/M
Fire Alarm Control Panel

- ▶ Compatible with EN 54-2 and EN 54-4
- ▶ Expandable up to 8 loops, max 1016 address capacity of each panels
- ▶ Real time clock

- ▶ Surface mount technology
- ▶ The key is needed for entry to panel menu
- ▶ Protection from electromagnetic interference
- ▶ Supervised peripheral devices, extension cards (power supply, loop extensions, printer..)
- ▶ Real time clock
- ▶ 4 programmable supervised remote control inputs
- ▶ Input/output modules can be connected to panel
- ▶ User friendly and aesthetic design and easy installation
- ▶ Advanced parametric arrangement options for input/output devices
- ▶ 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
- ▶ Communication interrupt for fast fire detection in 1.5 sec
- ▶ 1000 automation scenarios can be created for each panel
- ▶ Up to 64 panels and/or repeater panels can be assembled with CAN protocol
- ▶ Day and night mode, pre-alarm, contamination warning into a network

PANEL MODELS

Product code	Loop	Address
ML-1230.N/M *	0	0
ML-1231/M	1	127
ML-1232/M *	2	254
ML-1233/M	3	381
ML-1234/M *	4	508
ML-1235/M	5	635
ML-1236/M *	6	762
ML-1237/M	7	889
ML-1238/M *	8	1016

PANEL MODELS

Product code	Loop	Address
ML-1241.P/M	1	127
ML-1242.P/M *	2	254
ML-1243.P/M	3	381
ML-1244.P/M *	4	508
ML-1245.P/M	5	635
ML-1246.P/M *	6	762
ML-1247.P/M	7	889
ML-1248.P/M *	8	1016

* Marked products have the Turkish Loyd certificate as well.



Graphic Monitoring and Control...

7" TFT Mimic Panel

Maxlogic Intelligent Addressable System Mimic Panel is connected as a repeater panel to a network created from the Maxlogic panels, shows graphically the location of fire incidents on the maps previously uploaded by user and send commands, such as "reset", "alarm", "cancel alarm" to networked panels. It is easy to use and has an aesthetic design.

- ▶ Mimic Manager Software for easy programming via PC
- ▶ Integration of building projects into the ML-1280/M 7" TFT Mimic Panel via SD card
- ▶ Possible monitoring fire events graphically via Mimic Manager software
- ▶ Layered monitoring for each device
- ▶ Several display data for each device



Ability to monitor graphically for all Maxlogic fire alarm system small site and big site applications. 7" TFT Mimic Panel contains stylish exterior design and Surface Mount Technology (SMT) production techniques.

- ▶ Automatic or manual navigation between the maps in case of fire
- ▶ Possible sending information Alarm / Alarm Silence / Reset to all panels in network
- ▶ Visual fire location information via 7" TFT screen
- ▶ Intervention to right place
- ▶ Quick intervention

PANEL MODELS

Product Code	Description
ML-1280/M	Intelligent Addressable System 7" TFT Mimic Panel

ACCESSORIES AND OPTIONS

Product Code	Description
ML-1621	ML-1280 7" TFT Mimic Panel Software

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Perfect Software Communication...



Intelligent Addressable System GCU Panel

GCU panel provides communication between Maxlogic intelligent addressable fire detection system and supervisor and/or building management systems.



GCU Panel

- For the communication with supervisor, GCU panel uses RS-232, RS-485 for close access, IP based communication like GPRS and TCP/IP communication modules for longer distance.
- Connecting options of advanced modular structure with up to 16 expandable communication modules.
- GCU uses the same network with up to 63 panels.
- Through back-up working based structure, uninterrupted communication is provided.

GCU MODELS

Product Code	Description
ML-1207.K/M	Intelligent Addressable System GCU Panel, RS232/RS485 module included
ML-1207.C/M	Intelligent Addressable System GCU Panel, TCP/IP module included
ML-1207.G/M	Intelligent Addressable System GCU Panel, GPRS module included

Automatic or Manual Control Abilities...

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Smoke Damper Control Panels

Smoke damper control panels, offering high performance with the VIP communication protocols, can be programmed to operate in cause-affect scenarios, can be used to achieve fire automation.



ML-1355/M
Intelligent addressable
(8 inputs / 8 outputs) smoke damper
control panel with toggle switch card

- ▶ Compatible with EN-54-18
- ▶ Smoke dampers position information, ON/OFF/FAULT status can be displayed by LED indicators.
- ▶ 5 degree position of the status switch shows 'OFF' and 85 degree shows 'ON'.
- ▶ Easy programming by Loop manager
- ▶ Dampers positions that closed and open situations are excluded, Fault message can be sent by LED indicators end of the determined timeout.
- ▶ Intelligent addressable smoke damper control panel can be controlled via Enterprise automatically or manually.

SMOKE DAMPER MODELS

Product code	Description
ML-1353/M *	16 way I/O Panel (8 input / 8 output)
ML-1354/M *	Intelligent addressable system smoke damper control panel, 16 way I/O module
ML-1355/M *	Intelligent addressable system smoke damper control panel with toggle switch, 16 way I/O module

* Marked products have the Turkish Loyd certificate as well.

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Intelligent Integration of Advanced Systems...



Announce / Alarm Matrix Panel

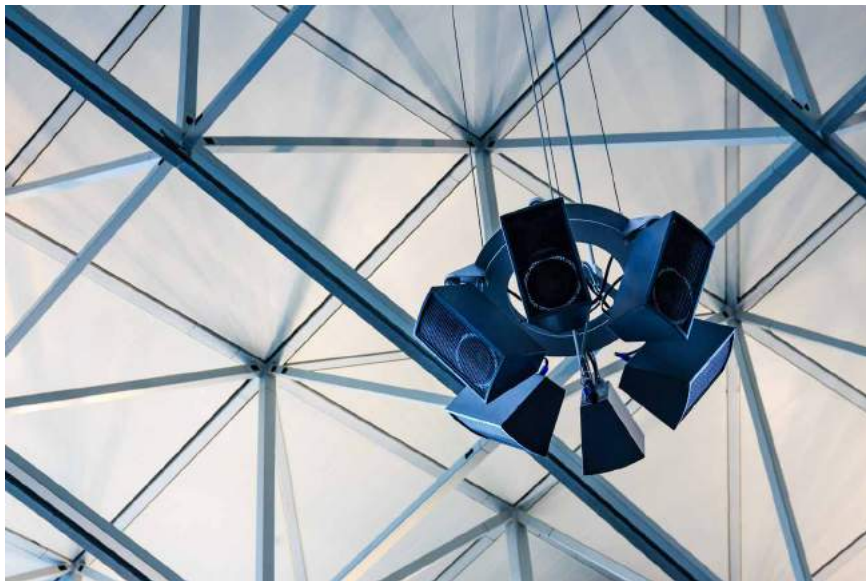
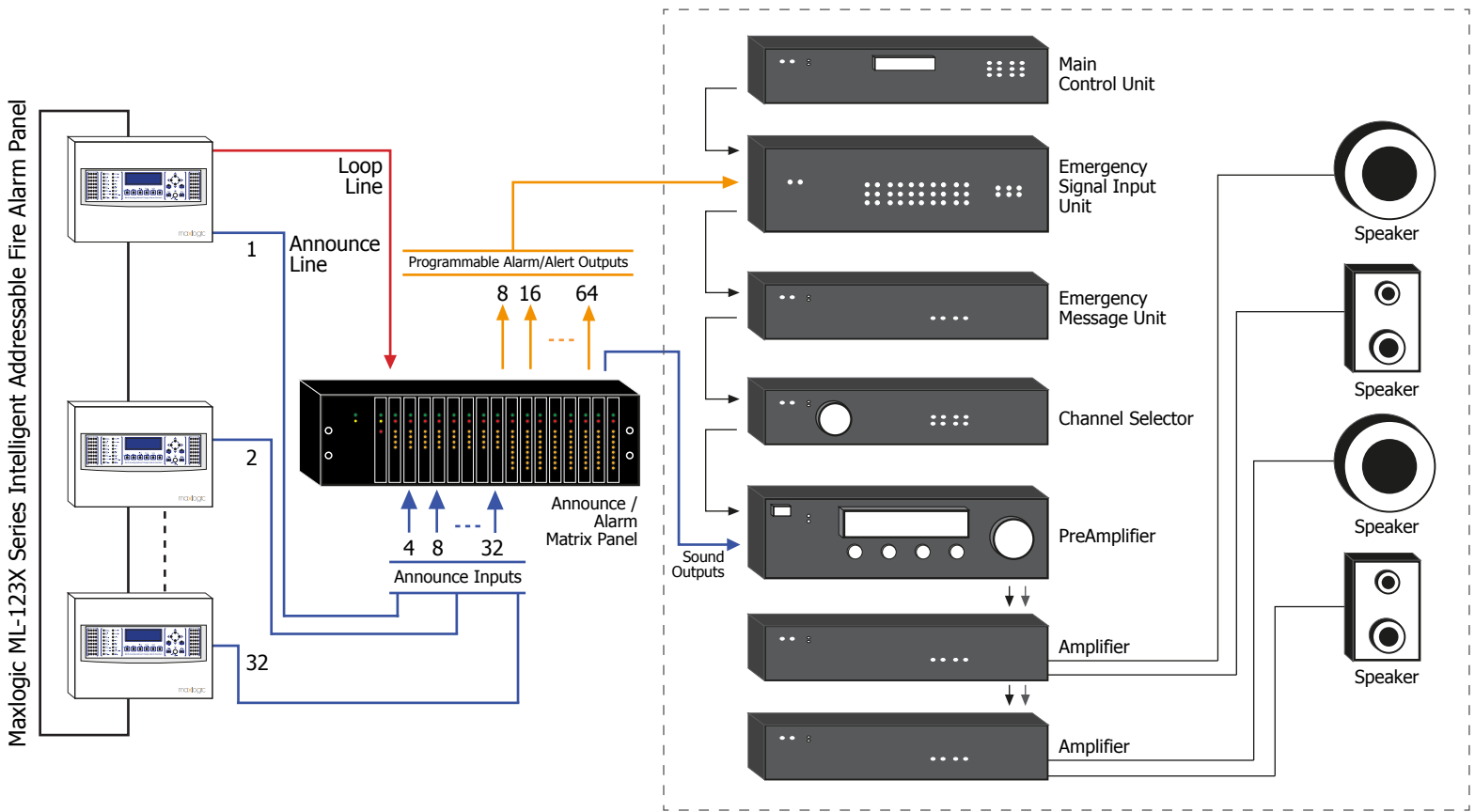
Announce / Alarm matrix panel provides the integration with announcement system.



ML-5020/M
Maxlogic Announce / Alarm Matrix Panel,
19", 3U Rack Structure

- ▶ Compatible with 19", 3U rack
- ▶ Modular structure expandable up to 16 modules
- ▶ Modules can be selected as announce microphone input and / or programmable alarm / warning output
- ▶ Up to 32 units of announce module connection inputs
- ▶ Ability perform announcement in 8 zone with the help of 60 announce microphone
- ▶ Possibility to perform announcement with pre-recorded messages in required zones
- ▶ Led indicators for communication and fault events
- ▶ LED indicators for active announce modules and active relay outputs
- ▶ Internal power supply

Announce System



- ▶ When fire and/or emergency situation occurs; with using Alarm/Alert output modules, it provides an automatic announce with pre-recorded messages or sound records via present announce system to the determined areas.

MODELS

Product code	Description
ML-5020/M	Maxlogic announce/alarm matrix panel, 19", 3U Rack, announce power module and internal power output
ML-5020.AI	Maxlogic announce input module
ML-5020.PO	Maxlogic programmable alarm/alert output module
MLY-5001	Maxlogic announce/alarm matrix blank panel



Managing and Controlling in Your Hands...

Intelligent Addressable System Input / Output Modules

Monitor and control modules, offering high performance by the VIP communication protocol, can be configured to operate in cause-effect scenario and fire automation can be performed.



ML-1373.SCI/M
Intelligent Addressable System 2/1 I/O Module (2 Inputs / 1 Output), with Short Circuit Isolator

ML-1366.SCI/M
Intelligent Addressable System 4/2 I/O Module (4 Inputs / 2 Outputs), with Short Circuit Isolator

- ▶ Compatible with EN 54-17 and EN 54-18
- ▶ Optional short circuit isolator models
- ▶ LED-indicated activation, fault, and communication status
- ▶ Easy mounting with rail system
- ▶ 2/1 I/O module with 2 zone monitoring inputs 1 sounder output option or 2 dry contact monitoring inputs 1 dry contact relay output option
- ▶ 4/2 I/O module with 4 dry contact monitoring inputs 2 dry contact relay outputs option

Dry Contact Input / Output Modules

Modules are loop-powered and can be programmed to operate in cause-effect scenarios. External systems can be monitored by switch monitor inputs and can be controlled by relay outputs within fire automation.

Switch monitor inputs are used for monitoring external dry switch relay output. Switches have normally open and normally close operate features. In case of changing of switch position, event type that is detected by panels can be determined by users.

The module has one relay output with voltage-free, bipolar contact max. load of 30V DC, 1A . The relay can operate as normally open or normally close.

The models have SCI, internal short circuit isolator, in case of short circuit events, isolates the line.



Energy Input / Output Modules

Energy Input/Output needs 18V - 30V DC external power supply and that can be monitored in case of fault event and programmable for cause-effect scenarios.

Zone monitoring Inputs are used to monitor the conventional type detectors and manual call points. In case of change of Input status, events type that are detected by panel can be determined by users.

24V DC 500mA sounder output can be activated within fire automation as required. 24V DC 500mA sounder output can be arranged according to event type that is determined by users.

With SCI models, internal short circuit isolator, in case of short circuit events, isolates the line.

MODELS

Product Code	Description
ML-1361/M *	Relay control module, 1-way output
ML-1361.SCI/M *	Relay control module, 1-way output, with short circuit isolator
ML-1362/M *	Switch monitor module, 1-way input
ML-1362.SCI/M *	Switch monitor module, 1-way input, with short circuit isolator
ML-1363/M *	2/1 I/O module (2 inputs / 1 output)
ML-1363.SCI/M *	2/1 I/O module (2 inputs / 1 output), with short circuit isolator
ML-1366/M *	4/2 I/O module (4 inputs / 2 outputs)
ML-1366.SCI/M *	4/2 I/O module (4 inputs / 2 outputs), with short circuit isolator

MODELS

Product Code	Description
ML-1371/M *	Sounder control module, 1-way output
ML-1371.SCI/M *	Sounder control module, 1-way output, with short circuit isolator
ML-1372/M *	Zone monitor module, 1-way input
ML-1372.SCI/M *	Zone monitor module, 1-way input, with short circuit isolator
ML-1373/M *	2/1 I/O Module (2 inputs / 1 output)
ML-1373.SCI/M *	2/1 I/O module (2 inputs / 1 output), with short circuit isolator
ML-1380/M *	Short circuit isolator
ML-1390/M *	Short circuit isolator
MG-6700/M *	Relay control module, 250V, 8A

* Marked products have the Turkish Loyd certificate as well.



Aesthetic and Technologic Genius...



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Intelligent Addressable Loop-powered Base Sounder / Sounder Beacon / Mounting Base c/w Buzzer

Maxlogic Intelligent addressable loop-powered base sounder is designed for indoor use, in case of fire, user is warned by audible and visible warnings. Sounders are microprocessor controlled and outputs can be programmed to work within cause-effect scenarios. Mounting base c/w buzzer, in case of detector alarm, the internal buzzer of mounting base is activated.

ML-1101/M
Addressable loop powered
base sounder

ML-1102/M
Addressable loop-powered
base sounder beacon



ML-0141/M
Mounting base c/w Buzzer

- ▶ Compatible with EN 54-3 and EN 54-23
- ▶ Specially designed for indoor use
- ▶ Loop-powered
- ▶ 85 dB sound output, 8 tones and volume control
- ▶ It can be used as a stand alone sounder/sounder beacon
- ▶ Its primary application is to be installed under intelligent analogue addressable smoke and heat detectors to provide both detection and alarm at the same point, reducing wiring and installation costs

Intelligent Addressable System Sounder / Beacon / Sounder & Beacon / Weatherproof

Intelligent addressable sounder, beacon, sounder & beacon / weatherproof; designed for intelligent addressable system, with full VIP communication protocol compatibility.



- ▶ Compatible with EN 54-3 / EN 54-23
- ▶ Short circuit isolator models compatible with EN 54-17
- ▶ 'Soft' addressable by use of address programmer
- ▶ Easily programmable by Loop Manager
- ▶ Able to integrate into the cause effect scenarios
- ▶ Stable sensitivity
- ▶ Suitable for outdoor use
- ▶ Compatible with all addressable fire alarm control panels
- ▶ PCB protected by metal case
- ▶ Aesthetic design
- ▶ Production by surface mount technology
- ▶ Adjustable different 32 voice tone options
- ▶ IP33 / IP65 high protection class options

MODELS

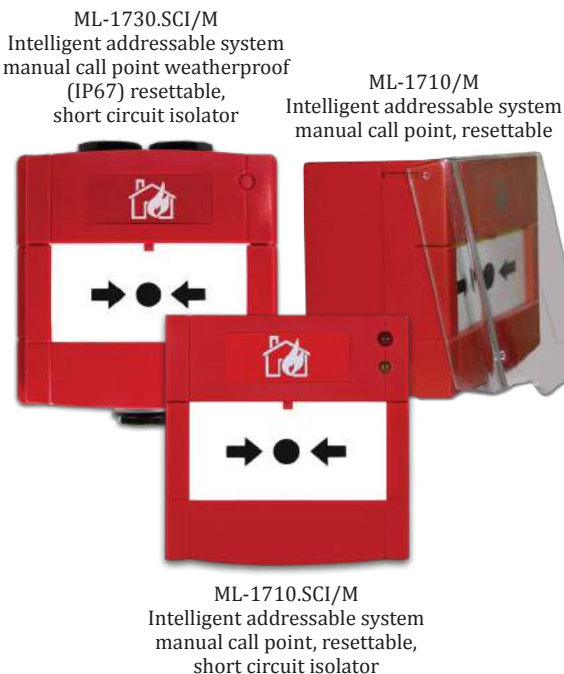
Product Code	Description
ML-1410/M*	Intelligent addressable system sounder
ML-1410.SCI/M*	Intelligent addressable system sounder with short circuit isolator
ML-1420/M*	Intelligent addressable system beacon
ML-1420.SCI/M*	Intelligent addressable system beacon with short circuit isolator
ML-1430/M*	Intelligent addressable system sounder & beacon
ML-1430.SCI/M*	Intelligent addressable system sounder & beacon with short circuit isolator
ML-1440/M*	Intelligent addressable system sounder, weatherproof (IP33)
ML-1440.SCI/M*	Intelligent addressable system sounder, weatherproof (IP33), short circuit isolator
ML-1450/M*	Intelligent addressable system beacon, weatherproof (IP33)
ML-1450.SCI/M*	Intelligent addressable system beacon, weatherproof (IP33), short circuit isolator

MODELS

Product Code	Description
ML-1460/M*	Intelligent addressable system sounder & beacon, weatherproof (IP33)
ML-1460.SCI/M*	Intelligent addressable system sounder & beacon, weatherproof (IP33), short circuit isolator
ML-1470/M*	Intelligent addressable system sounder, weatherproof (IP65)
ML-1470.SCI/M*	Intelligent addressable system sounder, weatherproof (IP65), short circuit isolator
ML-1480/M*	Intelligent addressable system beacon, weatherproof (IP65)
ML-1480.SCI/M*	Intelligent addressable system beacon, weatherproof (IP65), short circuit isolator
ML-1490/M*	Intelligent addressable system sounder & beacon, weatherproof (IP65)
ML-1490.SCI/M*	Intelligent addressable system sounder & beacon, weatherproof (IP65), short circuit isolator

Intelligent Addressable Manual Call Point

Design according to the EN 54-11 standards, with easy to install and easy to use features and useful accessories, the addressable fire alarm manual call points offer advanced and stable working performance.



- ▶ Compatible with EN 54-11 / EN 54-17
- ▶ Surface mount or flush mount
- ▶ Compatible with all addressable fire alarm control panels
- ▶ Microprocessor controlled
- ▶ Short circuit isolator models
- ▶ Transparent protection cover
- ▶ Easy resettable
- ▶ Stable sensitivity
- ▶ Communication interrupt for fast fire alarm detection in 1.5 sec.
- ▶ Production by surface mount technology

MODELS

Product Code	Description
ML-1101/M*	Addressable loop powered base sounder
ML-1102/M*	Addressable loop-powered base sounder beacon
ML-0141/M	Mounting base c/w buzzer

* Marked products have the Turkish Loyd certificate as well.

MODELS

Product Code	Description
ML-1710/M*	Intelligent addressable system manual call point, resettable
ML-1710.SCI/M*	Intelligent addressable system manual call point, resettable, short circuit isolator
ML-1730/M*	Intelligent addressable system manual call point, weatherproof (IP67), resettable
ML-1730.SCI/M*	Intelligent addressable system manual call point, weatherproof (IP67), resettable, short circuit isolator
ML-0710	Transparent protection cover

Excellent Harmony of Hardware and Software...



Intelligent Addressable Fire Detectors

Intelligent addressable fire detectors, offering high performance by the VIP communication protocol, provide a high level of reliability as a result of stable detection feature.

- ▶ Compatible with EN 54-5, EN 54-7 and EN 54-17
- ▶ Microprocessor controlled
- ▶ Twin fire alarm indicators for 360° viewing
- ▶ Remote indicator output
- ▶ Optional short circuit isolator module
- ▶ RY LED glows Red in case of fire, Yellow in case of pollution and fault conditions
- ▶ Compatible with ML-0121/M series surface mounting back box
- ▶ Easy mounting and dismantling



ML-1110.SCI/M
Optical smoke detector
with short circuit isolator

ML-1130.SCI/M
Heat detector
with short circuit isolator

ML-1140.SCI/M
Multisensor detector
with short circuit isolator



**Intelligent Addressable Heat Detector,
with short circuit isolator**

Heat detector detects temperature change by temperature-sensitive thermistors. The detector can work either as a fixed heat or rate of rise heat detector. Through Short circuit isolator, the line is isolated in case of short circuit.

**Intelligent Addressable Optical Smoke
Detector, with short circuit isolator**

Photo electric smoke detectors utilize the IR light scatter principle. The chamber is designed for protection from dust, insects and other external interferences. Through short circuit isolator, the line is isolated in case of short circuit.



**Intelligent Addressable Multisensor Detector,
With Short circuit isolator**

The multi-sensor detectors have a photo-electric smoke detection chamber and a temperature-sensitive thermistor. The chamber is designed for protection from dust, insects and other external interferences. Through short circuit isolator, the line is isolated in case of short circuit.



PANEL MODELS

Product code	Description
MG-9100/M *	Optical smoke detector
MG-9300/M *	Heat detector
MG-9400/M *	Multi-sensor detector
ML-1110/M *	Optical smoke detector
ML-1130/M *	Heat detector
ML-1130BS/M	Class BS heat detector with mounting base
ML-1140/M *	Multi-sensor detector
ML-1110.SCI/M *	Optical smoke detector, with short circuit isolator
ML-1130.SCI/M *	Heat detector, with short circuit isolator
ML-1140.SCI/M *	Multi-sensor detector, with short circuit isolator
ML-0140/M *	Detector mounting base
ML-0141/M	Mounting base c/w Buzzer
MG-3700/M *	Weatherproof back box for fire detectors
ML-0121/M *	Weatherproof surface mounting back box
MG-3510/M	Mounting base for detectors

* Marked products have the Turkish Loyd certificate as well.



**Designed
for Harsh
Environment
Conditions...**

Surface Mounting Back Box



ML-0121/M
Surface Mounting
Back Box

Surface mounting back box is designed for protection from harsh weather conditions.

MODELS

Product Code	Description
ML-0121/M*	Surface mounting back box

* Marked products have the Turkish Loyd certificate as well.

Keep Your
Eyes On The
Heights...

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Intelligent Addressable Beam Type Smoke Detectors

Designed with surface mounting Technologies to detect smoke through infrared beams in places that have high and wide areas (warehouse, malls, etc.)



Beam Type Smoke Detector
Receiver



Beam Type Smoke Detector
Transmitter



Reflective Beam Type Smoke Detector



Maxlogic beam type smoke detector consists of 2 parts; receiver and transmitter. They should be installed as facing each other between the distance of 5-100m.

Reflective beam type smoke detector consists 2 parts as a receiver/transmitter unit and reflector. Unit and reflector should be mounted as facing each other; distance is 5-35 meters with 1 reflector and 5-50 meters with using 4 reflectors.

Detectors detect the light obstruction percentage caused by the smoke created by fire.

- ▶ Intelligent addressable and conventional models
- ▶ Short circuit isolator models
- ▶ Receiver-Transmitter or reflective models
- ▶ 2 digit numerical screen for easy commissioning and setup

- ▶ With beam type smoke detector 1500 m², with reflective beam type smoke detector 750 m² protection area
- ▶ Easy programming buttons
- ▶ LED indicators for power, fire and fault conditions

- ▶ Ability to adjust itself to polluted and dirty environment
- ▶ Three sensitivity levels can be easily adjusted
- ▶ Continuous control of communication against the faults

DETECTOR MODELS

Product code	Description
ML-1170/M*	Intelligent addressable beam type smoke detector (included receiver-transmitter)
ML-1170.SCI/M*	Intelligent addressable beam type smoke detector (included receiver-transmitter) with short circuit isolator
ML-1173/M*	Intelligent addressable reflective beam type smoke detector
ML-1173.SCI/M*	Intelligent addressable reflective beam type smoke detector, with short circuit isolator
ML-2170/M*	Conventional beam type smoke detector (receiver and transmitter is included)
ML-2173/M*	Conventional reflector beam type smoke detector

* Marked products have the Turkish Loyd certificate as well.

Conventional System That Can Work In a Network...



Conventional Fire Alarm Control Panels

The ML-221XX/M series conventional fire alarm control panels are designed to provide economical solutions for medium and big applications with modern exterior design and Surface mount technology production technology.



ML-22116/M
Conventional
Fire Alarm Panel, 16 Zone

- ▶ Compatible with EN 54-2 and EN 54-4
- ▶ 2, 4, 8 and 16 zones
- ▶ Up to 32 repeater panels and/or fire panels assembled into a network with using repeater panel
- ▶ 230V AC 50 Hz power supply input
- ▶ Panel status can be monitored via PC. reset, alarm, alarm silence commands can be sent to panel, zone test and disable features can be performed
- ▶ Delay can be assigned to zones and sounders
- ▶ Up to 1000 events log memory
- ▶ Relay module 8-way (provides zonal relay output)
- ▶ Sounder module 8-way (provides zonal sounder output)
- ▶ Easy event log transfer by RS-485 port with computer program
- ▶ 2 sounder outputs, fire alarm and fault relay

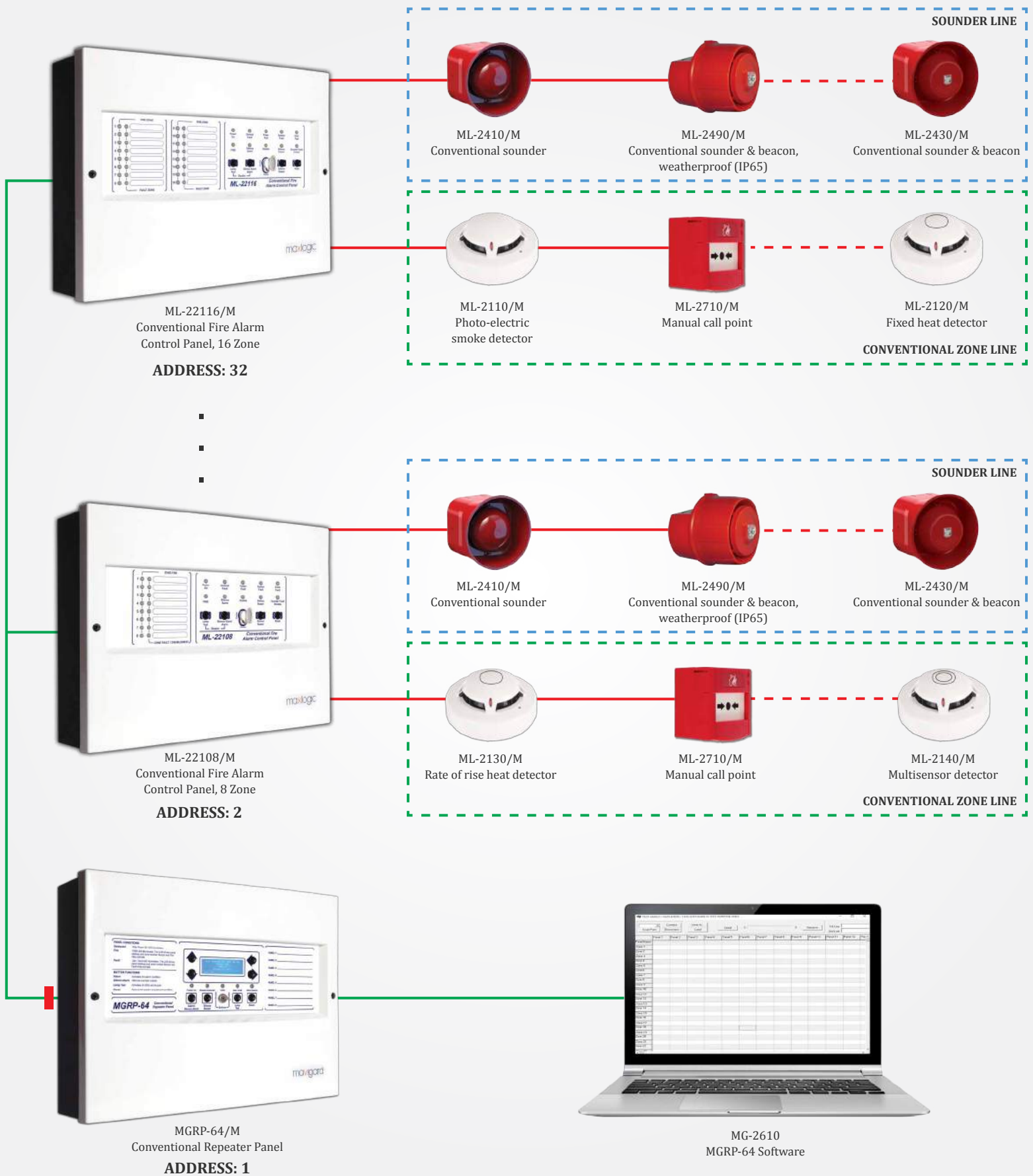
MODELS

Product code	Description
ML-22102/M *	Conventional fire alarm control panel, 2 zone
ML-22104/M *	Conventional fire alarm control panel, 4 zone
ML-22108/M *	Conventional fire alarm control panel, 8 zone
ML-22116/M *	Conventional fire alarm control panel, 16 zone

* Marked products have the Turkish Loyd certificate as well.

MODELS

Product code	Description
MGRP-64/M*	Conventional Repeater Panel



- ▶ Fire and fault are monitored through zone LEDs and piezoelectric buzzer
- ▶ Sounder, fault and fire relay outputs
- ▶ Zones can be tested with one-man, through zone test feature
- ▶ Specific zones and/or sounder outputs can be disabled through zone disable and sounder disable features
- ▶ Stable sensitivity
- ▶ Protection from electromagnetic interferences

New Perspective at Detection Technology...

Conventional Fire Alarm Detectors

Ergonomic and user friendly conventional fire alarm detectors are designed for maximum protection with their stability and sensitivity.

- ▶ Compatible with EN 54-5 and EN 54-7 standards
- ▶ Twin LED indicators for 360° view
- ▶ Microprocessor controlled
- ▶ Compatible with ML-0140/M series mounting base c/w relay
- ▶ Compatible with ML-0141/M series mounting base c/w buzzer
- ▶ Remote indicator output
- ▶ Compatible with ML-0121/M series surface mounting back box
- ▶ 2 pcs red LEDs (the light flashes continuously in case of fire-situation, the light flashes once per 8 second in case of normal-status, the light flashes twice per 8 second in case of fault-status)



Detector Mounting Base

Compatible with Maxlogic conventional fire detectors.

Contact metals of ML-0140/M mounting base have 301 quality and stainless type metals. These contacts are with clips in order to prevent intermittent contact.



Detector Mounting Base c/w Buzzer

When the detector alarms, at the same time internal buzzer is activated. Compatible with all conventional system detectors.

The mounting base c/w Buzzer is powered from detector line.



Conventional Photo-Electric Smoke Detector

Photo-electric smoke detector has an infrared photoelectric smoke detection chamber which utilizes the infrared light scatter sensing principle. The detection chamber is protected from dust, insects and other external interferences.

Conventional combined heat detector

The detector can work either as a fixed heat or rate of rise heat detector. Fire alarm signal is generated in case of 30°C/min or higher heat rise and/or on reaching the threshold of 60°C.

Conventional Fixed Heat Detector

The fire alarm signal generated on reaching the threshold of 60°C. For special orders, fixed heat detectors with different threshold levels can also be manufactured.



Conventional Multi-sensor Detector

Multi-sensor has an infrared photoelectric smoke detection chamber utilizing the infrared light scatter sensing principle and a temperature-sensitive thermistor. The detection chamber is protected from dust, insects and other external interferences.

MODELS

Product Code	Description
MGR-2100/M *	Photo-electric smoke detector, with relay output, 12V DC
MGR-2300/M *	Combined heat (rate of rise) detector, with relay output, 12V DC
MGR-2400/M *	Fixed heat detector, with relay output, 12V DC
MGR-2500/M *	Multisensor detector, with relay output, 12V DC
ML-2110/M *	Optical smoke detector
ML-2120/M *	Fixed heat detector
ML-2130/M *	Rate of rise heat detector
ML-2130BS/M	Class BS heat detector with mounting base
ML-2140/M *	Multi-Sensor detector
ML-0140/M *	Detector mounting base
ML-0141/M	Mounting base c/w buzzer
ML-0144/M *	Detector mounting base (B class)
MG-3700/M *	Weatherproof back box for fire detectors
ML-0121/M *	Surface mounting back box

* Marked products have the Turkish Loyd certificate as well.

Perfect Compatibility between System and Accessories...



Conventional Sounder / Sounder & Beacon, Conventional Sounder / Beacon / Sounder & Beacon, Weatherproof



Conventional Sounder

Maxlogic series conventional sounders provide stable performance in indoor applications and are compatible with all conventional panels.

- ▶ Compatible with EN 54-3
- ▶ Surface mount or flush mount
- ▶ Adjustable different 32 voice tone options
- ▶ Low or high voice power control
- ▶ Microprocessor controlled



Conventional Sounder & Beacon

Maxlogic series conventional sounder beacon generates audible and visual signal, in addition to these features.

- ▶ Compatible with EN 54-3 and EN 54-23
- ▶ Adjustable different 32 voice tone options
- ▶ Adjustable flash frequency and coverage area
- ▶ White, strong LED flasher



Conventional Sounder, Beacon, Sounder & Beacon, Weatherproof

Maxlogic series conventional sounders are weather-proof audible warning devices and suitable for outdoor use.

- ▶ Compatible with EN 54-3 and EN 54-23
- ▶ Adjustable different 32 voice tone options
- ▶ Adjustable flash frequency and coverage area
- ▶ IP33 / IP65 high protection class options
- ▶ Suitable for outdoor use
- ▶ White, strong LED flasher

Sounder Expansion Panel

Compatible with all Intelligent addressable and conventional panels.



ML-0314/M
Sounder expansion panel

- ▶ Compatible with EN 54-18 and EN 54-4 standards
- ▶ 4 supervised sounder output, each are 1A, 24 V DC
- ▶ Sounder outputs are supervised and continuously monitor for open and short circuit
- ▶ Direct connection to addressable and conventional systems
- ▶ Continuous control against power supply failure
- ▶ Direct supply from the batteries when the power supply is cut
- ▶ Battery charge voltage is automatically adjusted according to ambient temperature

Conventional Manual Call Points

Designed according to the EN 54-11 standards, with easy to install and easy to use features and useful accessories, the conventional fire alarm manual call points offer superior and stable working performance.



Conventional Manual Call Point, Resettable

The MCP is activated by manual pressing on the flexible plastic cover. The switch, normally resting on flexible plastic cover, changes position and retains it until it is brought into its initial position.

- ▶ Easy resettable
- ▶ LED indicated activation
- ▶ Compatible with EN 54-11 standards
- ▶ Surface mount or flush mount
- ▶ Compatible with all conventional fire alarm panels
- ▶ Transparent protection cover

Smoke Detector Tester / Sabre

Smoke detector tester is a functional testing product for ionization and optical smoke detectors.

- ▶ UL listed
- ▶ Non-flammable
- ▶ Non-toxic
- ▶ Easy to use
- ▶ Does not damage the detector
- ▶ High speed draft
- ▶ Doesn't damage plastic surface and internal structure
- ▶ No silicon content, ozone friendly with no CFCs

MODELS

Product code	Description
ML-2710/M *	Manual call point, resettable
ML-0710	Transparent protection cover
ML-0314/M	Sounder expansion panel
SMOKE	Smoke detector tester / sabre
SABRE 01-001	

* Marked products have the Turkish Loyd certificate as well.

MODELS

Product code	Description
ML-2410/M *	Conventional sounder
ML-2420/M *	Conventional beacon
ML-2430/M *	Conventional sounder & beacon
ML-2440/M *	Conventional sounder, weatherproof (IP33)
ML-2450/M *	Conventional beacon, weatherproof (IP33)
ML-2460/M *	Conventional sounder & beacon, weatherproof (IP33)
ML-2470/M *	Conventional sounder, weatherproof (IP65)
ML-2480/M *	Conventional beacon, weatherproof (IP65)
ML-2490/M *	Conventional sounder & beacon, weatherproof (IP65)

Reliable Choice for Exproof Applications...

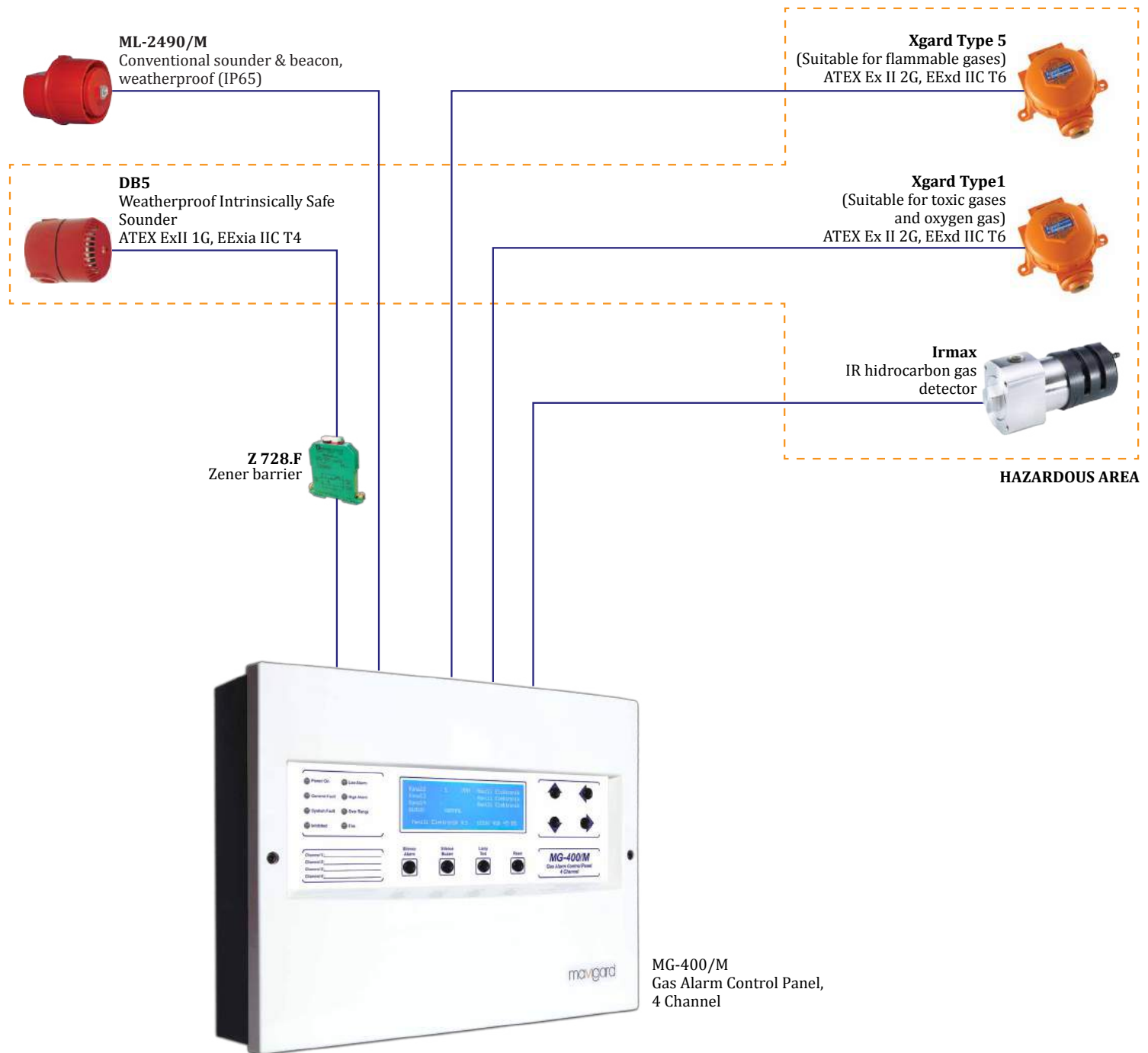
Gas Alarm Control Panel 4 Channel

The modern design panel, offering advanced programmability and high performance with its 4 channels, is widely applicable for industrial use. Panels offer many features to integrate to automations applications.



MG-400/M
Gas Alarm Control Panel,
4 Channel

- ▶ The panel has 4 channels, each capable of hosting 1 industrial type gas detector or 20 conventional fire detectors
- ▶ Large graphic 240x64 pixels LCD with adjustable backlight displays system information, including gas detector measurements, alarms and faults
- ▶ Adjustable high and low alarm thresholds
- ▶ Sending signals to different systems via high and low alarm relays, high level fault relay, and general fault relay



- ▶ Compatible with Industrial gas detectors and 4-20 mA converter
- ▶ Desired channels can be disabled, sounder outputs and relays can be tested, gas detectors can be zeroed and calibration can be done via panel.
- ▶ It is possible to enter zone location names for panels and detectors
- ▶ Channel measurement unit can be chosen from "%LEL", "PPB", "PPM", "%VOL" or "GAS"
- ▶ High and low alarm warnings can be selected according to ambient gas density.
- ▶ Latching/non-latching relay outputs
- ▶ Relays can be set as NO or NC
- ▶ Latching/non-latching sounder outputs
- ▶ Compatible with two and three wire detectors
- ▶ Sink and source operating selection for channels
- ▶ Password access and remote control for protection against unauthorized intervention

MODELS

Product Code	Channel Capacity
MG-400/M	4

Perfect Extinguishing Automation...



Conventional Fire Extinguishing Control Panel

Conventional series fire extinguishing control panel operates on cross-zone principle, has 4 detection zones and one extinguishing release output which is programmable according to the zone requirements. Conventional extinguishing control panel is microprocessor controlled, offers high performance and can easily be integrated into all extinguishing projects.

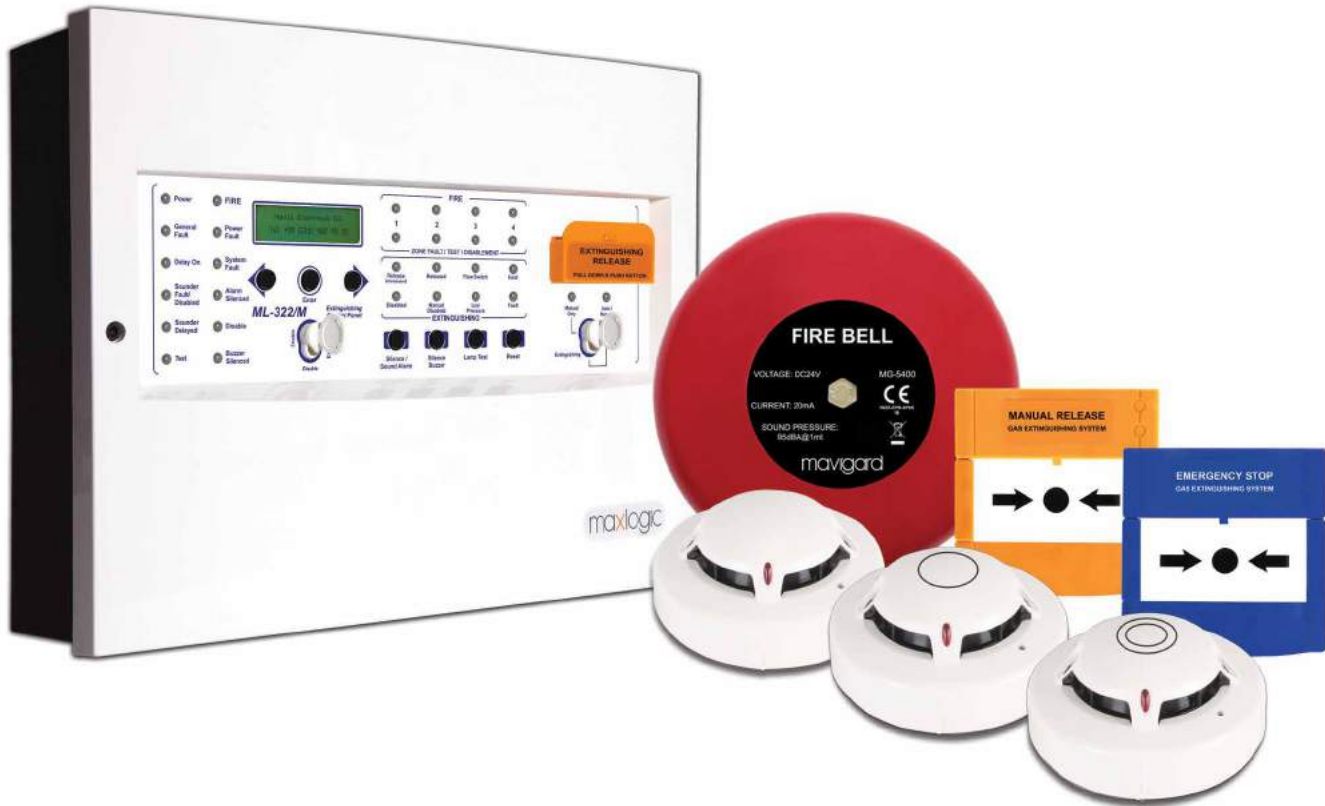
30



ML-322/M
Fire extinguishing control panel

ML-3313/M
Extinguishing status indicator unit,
with extinguishing status switch
and releasing but

- ▶ Compatible with EN 12094-1, EN 54-2 and EN 54-4 standards
- ▶ 4 detection zones, 1 extinguishing zone
- ▶ Extinguishing-related front panel LEDs and LCD screen provide full system information
- ▶ Display of two warnings from two devices on the detection zones with fire zone LED
- ▶ Up to 8 pcs extinguishant condition indicator units can be connected to one pcs fire extinguishing panel



- ▶ Adjustable first level delay time to sounders
- ▶ Adjustable delay time to detection zones
- ▶ Configurable delay and extinguishing time
- ▶ Non-latching zone option
- ▶ Countdown clock until the starting of extinguishing
- ▶ Fire and fault LEDs for each detection zone
- ▶ Supervised zone detection inputs, extinguishing hold input, extinguishing abort input, extinguishing activation input, low pressure input.
- ▶ Real time clock
- ▶ Supervised extinguishing output, second level sounders, gas release output
- ▶ Extinguishing mode can be changed remotely with extinguishing status key input
- ▶ Fire and fault relays
- ▶ Dry contact relay output for fire and fault
- ▶ Dry or energized contact options for outputs
- ▶ Favorable structure for integration with mechanical systems
- ▶ Cross-zone operation can be selected to be active/passive via PC software
- ▶ Up to 1000 events log memory
- ▶ Event log can be monitored via PC software
- ▶ Sending event log via RS-232 to PC or printer
- ▶ There are two extinguishing operating types; automatic and manual or manual only
- ▶ Detection zones can be tested or disabled, 1. and 2. Level relay output, extinguishing output and extinguishing abort button can be disabled
- ▶ Inputs and outputs of panel, inputs and outputs of expansion module can be programmed via special PC software. Possibility of assigning gas active, remote alarm, remote reset and many more features to the inputs

PANEL MODELS

Product code	Detection zone	Extinguishing zone
ML-322/M *	4	1

ACCESSORIES

Product code	Description
ML-3313/M *	Extinguishing status indicator unit, with extinguishing status switch and releasing button
ML-3610	Ex Manager software for ML-322
ML-2110/M *	Conventional photo-electric smoke detector
ML-2120/M *	Conventional fixed heat detector
ML-2130/M *	Conventional rate of rise heat detector
ML-2140/M *	Conventional multisensor detector
MG-5400/M *	Electronic alarm bell
ML-2710.MR/M *	Extinguishant manual release button
ML-2710.ES/M *	Extinguishant emergency stop button

* Marked products have the Turkish Loyd certificate as well.

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