

MA-1& Analog Addressable Fire Alarm Control Panel

with Integrated Amplifier & Push-to-Talk Palm Speaker Microphone

MA-1& - MTech's all-in-one solution integrates a multi-loop analog addressable fire alarm control panel with an internal amplifier and push-to-talk palm speaker microphone.

MA-1& can support up to 126 XP95, Discovery, or 252 for Soteria analog addressable devices as well as a range of call points, detectors, interfaces, beacons, and loop sounders.

Its components all operate as part of a fully integrated system, with the panel, detectors, interfaces, manual audio notifications, and other ancillaries working in full compatibility.



System Functionality:

- Multiple-stage and complex cause-and-effect programming: a wide range of user-controllable functions and three stages of cause-and-effect programming per output device, meeting the needs of diverse small-to-medium-scale projects and sites.
- Delivers full system integrity also in the event of an external short-circuit fault, so when a short-circuit is detected, isolators on the devices closest to the problem automatically isolate the fault and drive communication from both ends of the loop to sustain full communication with all system devices.
- System can be extended using local network communications to include conventional panels while maintaining full control of inputs and outputs from MA-1.
- Internal amplifier with a push-to-talk palm microphone for audio notifications and alerts.
- Speaker consumption of up to 100W.

Features & Benefits:

- Simple and comprehensive four-row graphic display.
- Easy to install and maintain.
- Internal self-testing device that is operated manually.
- Quick scan of connected detectors analog values, and report exported to Excel spreadsheet.
- Improved protection against false alarms (in case of ground fault or strong noise).
- Flexible programming abilities using virtual zones.
- 1-second response to an alarm or network failure.
- Isolated from noise.
- Protected from network communication data loss.
- MA-1& can be programmed on-site or by using the MTech site installer software on a PC.
- All-in-one solution saving space and easy access.
- Built-in amplifier for exceptional audio quality and clear audio.
- Simple, safe, and reliable audio notifications and alerts.
- Background music input which is overridden during emergency events and paging.
- Priority for push-to-talk microphone.
- Multiple supervised emergency microphones for each entrance to the building.
- Cost-efficient with simplicity.
- User-friendly and convenient for reliable one-way communication.
- Output selectable 100V or 70V.
- Integrated field recordable digital evacuation message player.
- 2 Line/Mic supervised priority inputs.
- Auxiliary input for music PL 3.5mm.
- Network supervised input-output.
- Common trouble relay.
- Message active relay for beacons.
- LED indicators for all trouble and activation.
- Volume regulators for all inputs.
- Overheat and short-protected.
- Build-in power supply 156W, 2x 12V 20Ah maximum battery.
- RS485 LNet connection trouble and activation MTech network.
- Capable of connecting gooseneck microphones.
- Automatically converts voltage from 110V to 220V and vice versa.

Technical Specifications:

Code	MA-1&AMP
Description	Analog Addressable Fire Alarm Control Panel
	Integrated Amplifier MA-PAVA with Push-to-Talk Palm Speaker Microphone
Standards	The Standards Institute of Israel (SII) 1220

Specification	
Operating Voltage	24V
Quiescent Current	140mA
Sound Output	100V 100W
Frequency Response	ULC: 400 Hz to 4 kHz at -3 dB ULI: 800 Hz to 2.8 kHz
Harmonic Distortion	< 4%

Input	
Microphone	Mic up to 30mV or Line up to 300mV
Programmable	Two addressable inputs on board
DRC	Dry contact control (for door tamper switches)
End-of-Line Device	MA-EOL
Configuration	Class B
Thermal Trip Point	150 °C
Panel Display	4-line x 16-character LCD, multilingual support
Panel Keyboard	Full numeric keyboard, Reset, Silence, Info, ACK, Enter, ESC, Navigation Rows.
Panel Indication	LED indication: AC, Alarm, Trouble, Silence, Supervisory, Disable, Dialer Dault, Ground Fault, and an additional 8 indications that can be configured by the end-user
Sound	Internal alarm sounder
Number of Loops	1 SLC loop Class A with option to add up to 10-loops Class A
Loop Powered Outputs	700 mA power per loop
Addresses Per Loop	Up to 126 XP95 and Discovery addressable devices and up to 252 CoreProtocol addressable devices
Programming Port	USB port for PC communication

Output	
Output Ports	RS485 and RS232
Panel Sounder Circuit	1 O/P NACs (600mA)
Panel Auxiliary Outputs	AUX 24VDC 2A, AUX resettable 24VDC 300mA
Panel Relays	Alarm (1), trouble (1), programmable (3)

Network	MA-NET network card for RS-485 network for communication up to 64 panels in network with global correlation matrix
	MA-NET TCP/IP - network card for TCP/IP network
	LNET/RS-485 for communication of up to 32 Conventional MB-202, 204, and 208 panels or/and up to 4 remote annunciators MA-1050A per FACP.
Event History	Buffer for 2,000 events with date and time stamp and 10,000 events in MA-NET card buffer
Service	Built-in walk test

Power	
Input Voltage	Input 120VAC 3.2A/230VAC 1.6A; 50/60Hz
Operated Voltage	24VDC 6.5A
Battery	Two 12V 7Ah or two 12V 12Ah (dependent)

Physical	
Environmental Operating Temperature	0°C to +49°C
Humidity (Non-Condensing)	0 - 93% RH
Physical Construction	Metal box
Weight	7kg
Color	RAL 3000
Ingress Protection	IP31
Cable Entries	top (4), right (3), left (1)

Compatibility	
Suitable for Use With:	MTech MA Analog Addressable Fire Alarm Systems
	MTech MB Conventional Fire Alarm Systems
	MA-1050A Remote Annunciator
	MA-Monitoring Graphical Management Software

Dimensions:

W. 370 mm | H. 393 mm | D. 112 mm

Order Code:	MA-1&AMP
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