# **MX 48**

#### 8 Channel Controller

- Easy operation
- Up to 8 channels
- Programming by keypad or PC





he MX 48 is designed to protect your property and personnel in environments likely to contain flammable or toxic gases.

Equipped with up to 8 independent channels, the MX 48 can be used to control different types of detectors. In fact, this unit is compatible with all the detector-transmitters in the Industrial Scientific range and any detector with a standard 4-20 mA output.



## **MX 48**

#### **Designed To Meet Your Needs**

The MX 48 caters to a wide range of possible uses, adapting to your safety requirements.

The variety of programming options, by keypad or computer, ensures it meets specific user needs. Furthermore, the MX 48 is open-ended, so that if required, subsequent extensions or modifications can be added.

Easy to install and very flexible to use, the MX 48 can handle multiple applications to accommodate your technical requirements at lower costs.

#### Measurement and alarm unit

The MX 48 is designed for prevention, action and detection. The controller:

- monitors sensors and detectors
- displays the nature, concentration, measurement and unit of the gas detected (in cyclic mode)
- triggers alarms if the measurement exceeds thresholds
- actuates relays for the control of warning devices, valves and mimic panels
- · indicates faults
- transmits data via analog and serial outputs
- has enhanced European standards EN 50054, 50081, 50082 and low voltage directives

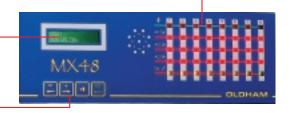




#### **Enhanced Ergonomics and Performance**

#### **User-friendly display panel**

Fixed or scrolling LCD display on two lines of 16 characters



5 indicator lights per channel:

- on/off
- AL1
- *AL2*
- AL3Fault

4-button keypad

#### Triple alarm level

- 3 individually adjustable alarm levels
- Alarms 1 and 2 are instantaneous
- Alarm 3 time-delayed or based on average rate
- · Local or remote acknowledgement

#### Simple operation

- 4-20 mÅ input so that any type of standard detector can be connected
- Common serial output in Modbus (J-BUS) format
- Analog outputs-one per channel



#### **High reliability**

- Fault monitoring
- Alarm activation
- Internal testing of LED's and display
- Transmission of measurements, alarms, failures and relay status via RS232 or 485
- Programmable relays-ND or NC for fail safe operation
- Maintenance bypass mode indicated by an LED

#### Safe and secure unit

- Protection against radio frequencies and industrial interference, to avoid false alarms in environments subject to electrical interference (EMC compliance)
- Integrated protection against human operating errors
- Protected access to programming



#### **SPECIFICATIONS**

Type: Wall mounted controller

Function: Microcontroller-based multichannel monitor

Capacity: Up to 8 channels

Display: Fluorescent, 2 lines of 16 characters

Fixed or scrolling

ALARMS:

Fault alarm: Yellow LED on each channel

Action on common relay

3 independent thresholds per channel (Red LED's) Gas alarm:

3rd threshold time-delayed

or mean value

Manual or automatic reset

2 relay outputs per channel

common relay on alarm 3

Audio Alarm: 80 db at 30 cm

Relay output: 2 gas alarm relays per channel

1 relay common for alarm 3

Programmable positive or negative safety on alarm relay

Positive safety on failure Programmable NO or -NC

**MEASUREMENT INPUT:** 

Flammable Bridge Type Type of Detectors:

Flammable transmitter, toxic or

oxygen detector, (type 4-20 mA)

Link: 2 or 3 wires Loop Impedance: Flammable, 3 wires - 32  $\Omega$ 

4-20 mA : 2 or 3 wires - 56  $\Omega$ 

Average line length (in meters at 20°C for a 1,5

mm<sup>2</sup> conductor)

Flammable: 1,000 m/ 4-20 mA -

Signal output: Analog 4-20 mA per channel,

load resistance : 600  $\Omega$  max.

Serial RS 485 or 232 in Modbus (J-BUS)

format, opto-insulation an option

Power supply: 109 to 122 V AC or 207 to 277 V AC

21 to 31 V DC

Power consumption: 200 VA or 150 W

Miscellaneous: Acknowledgement : local or remote

Operating temperature: -20°C to +55°C

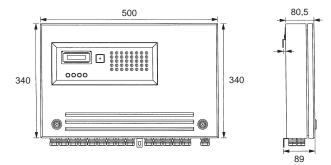
Relative humidity 5% to 95%,

uncondensed

Compliant with European Standards 50054, 50081 and 50082

Protection: IP 65 Weight: 11 Kg

Dimensions: H 340 x W 500 x D 89 mm



### INDUSTRIAL SCIENTIFIC

#### **CORPORATION**

#### **CORPORATE HEADQUARTERS**

1001 Oakdale Road · Oakdale, PA · 15071-1500 · USA

www.indsci.com

ISO9001:2000 CERTIFIED

**AMERICAS** 

Tel.: +1-412-788-4353 Fax: +1-412-788-8353 info@indsci.com

**ASIA PACIFIC** 

Tel.: 86-10-8497-3970 Fax: 86-10-8497-3971 sales@isc-cn.com

**EUROPE** 

Tel.: 33-3-21-60-80-80 Fax: 33-3-21-60-80-00 info@groupoldham.com

AUSTRALIA / NZ

Tel.: +61-2-8870-3400

**CZECH REPUBLIC** 

Tel.: +420-234-622-222/3

**GERMANY** 

Tel.: +49-231 / 9241-0

**ITALY** 

Tel.: +39-011-3801371

**MIDDLE EAST** Tel.: +971-50-455-8518

**NETHERLANDS** 

Tel.: +31-76-5427-609

**SINGAPORE** Tel.: +65-6561-7377

**SWITZERLAND** Tel.: +41-26-652-51-18 UNITED KINGDOM Tel.: +44-0-1782-562002