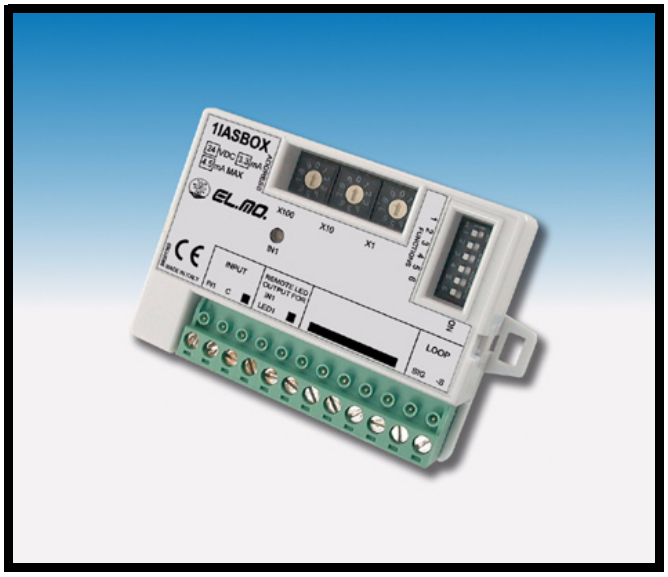
GLOBAL SECURITY SOLUTIONS



CE

CPD certification
n° 0051 - CPD - 0276

1 Input Analogue Addressable Module

1IASBOX

TECHNICAL MANUAL

FOREWORD

FOR THE INSTALLER:

Please follow carefully the specifications relative to electric and security systems realization further to the manufacturer's prescriptions indicated in the manual provided.
Provide the user the necessary indication for use and system's limitations, specifying that there exist precise specifications and different safety performances levels that should be proportioned to the user needs. Have the user view the directions indicated in this document.

FOR THE USER:

Periodically check carefully the system functionality making sure all enabling and disabling operations were made correctly.
Have skilled personnel make the periodic system's maintenance. Contact the installer to verify correct system operation in case its conditions have changed (e.g.: variations in the areas to protect due to extension, change of the access modes, etc…)

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This device has been projected, assembled and tested with the maximum care, adopting control procedures in accordance with the laws in force. The full correspondence to the functional characteristics is given exclusively when it is used for the purpose it was projected for, which is as follows:

1 Input Analogue Addressable Module

Any use other than the one mentioned above has not been forecasted and therefore it is not possible to guarantee its correct operativeness.
The manufacturing process is carefully controlled in order to prevent defaults and bad functioning. Nevertheless, an extremely low percentage of the components used is subjected to faults just as any other electronic or mechanic product. As this item is meant to protect both property and people, we invite the user to proportion the level of protection that the system offers to the actual risk (also taking into account the possibility that the system was operated in a degraded manner because of faults and the like), as well reminding that there are precise laws for the design and assemblage of the systems destinated to these kind of applications.

The system's operator is hereby advised to see regularly to the periodic maintenance of the system, at least in accordance with the provisions of current legislation, as well as to carry out checks on the correct running of said system on as regular a basis as the risk involved requires, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. The user must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.

Design, installation and servicing of systems which include this product, should be made by skilled staff with the necessary knowledge to operate in safe conditions in order to prevent accidents. These systems' installation must be made in accordance with the laws in force. Some equipment's inner parts are connected to electric main and therefore electrocution may occur if servicing was made before switching off the main and emergency power. Some products incorporate rechargeable or non rechargeable batteries as emergency power supply. Their wrong connection may damage the product, properties and the operator's safety (burst and fire).

YOUR DEALER:

1. GENERAL

1IASBOX module has been designed for advanced fire detection systems managed by FX/50, FX/20 and FX/10 control panels (and other compatible) equipped with loop operating with **AS protocol**; it is equipped with 1 balanced/ non-balanced programmable input.

The module can be connected to devices or traditional fire detectors with NO relay output contacts (free from potential).

The digital transmission of the alarm event is triggered when the module receives an alarm, that is, when the detector contact closes. The alarm condition is kept until the contacts go back to NO status. When the contact closes, a 18KOhm resistance will be connected in parallel to the 47KOhm line balancing resistance; open line or short-circuited status will be detected as fault condition by the module. The alarm condition can be signalled next to the detector by connecting a low-consumption LED diode (as specified below) to the terminal output. Module input can be set to "non-balanced" by using the dipswitch no. 1 (OFF). In this case, the end-of-line resistor is not required and the detector contact has to be directly wired to the terminals. When the detector contact closes, the module will receive the alarm event, but it will no longer be able to detect (and signal) the fault event (but only alarm event).

1IASBOX is equipped with a two-colour LED to indicate: input fault condition (blinking red), alarm status (steady red), and interrogation status (blinking green, the unit interrogates the module). Use dipswitch no. 2 (OFF) to disable input fault conditions and alarm status signalling (red light).

1IASBOX module communicates with the fire panel over serial loop and in case of correct communication, the two-colour LED will blink green. The loop is connected to the **AS protocol** via SIG and -S terminals. This connection does not require an external power supply unit.

1IASBOX module is supplied with a reduced-dimension plastic housing and is also suitable to be installed on 503-type flush-mount boxes.

2. TECHNICAL SPECIFICATIONS

Model:	**1IASBOX**
Protection class:	IP4X
Power supply:	DC24V
Operating voltage:	DC20,5 to 27,5V
Power consumption:	3,3 mA idle mode, 4,5 mA max alarm mode.
Connections:	terminals for inputs, signals communications and serial loop connection.
LED indicators:	(on board) two-colour LED indicator for alarm and fault events (selectable), and communication status.
Controls:	rotary dip switches to set ID address. 6-pin dip switch to set operating functions.
Operating temperature:	-10 to +50°C; 93% r.h.
Weight:	58 g.
Dimensions:	W 91,6 x H 54,7 x D 20 mm.
Distance between centers:	W 84 mm.
Parts supplied:	technical manual, balancing resistors (1 x 18KOhm, 1 x 47KOhm).

3. PRODUCT COMPLIANCE

1IASBOX module is compliant with EMC 89/336/EEC directive: tests have been carried out according to EN50130-4 +A1 + A2 on immunity and EN 61000-6-3 on electromagnetic compatibility.

As to electric safety, 1IASBOX module is compliant with LVD 73/23/EEC directive on low voltage safety: tests have been carried out according to EN 60950-1 standard.

1IASBOX module is also compliant with EN54-18 standard.

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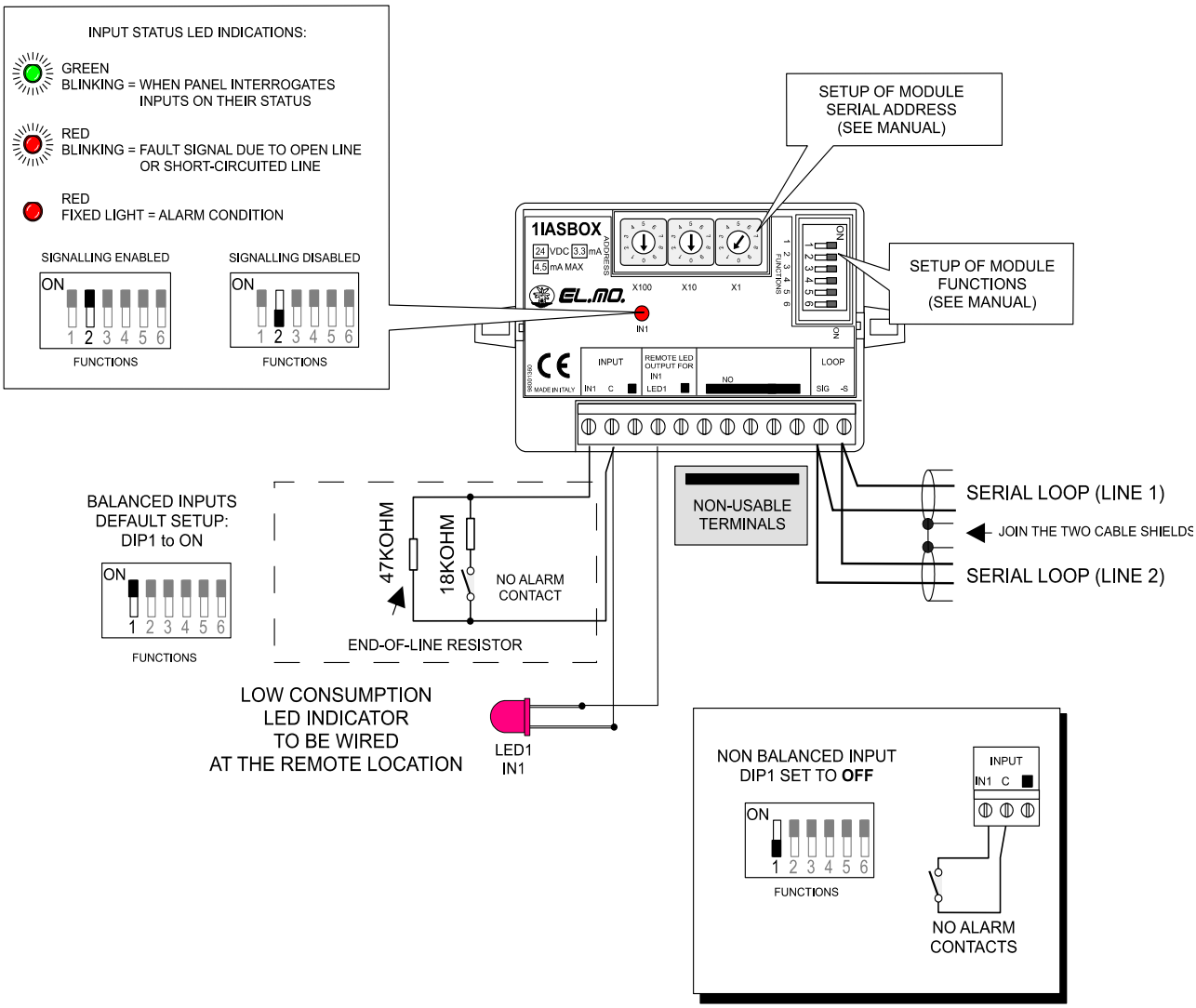
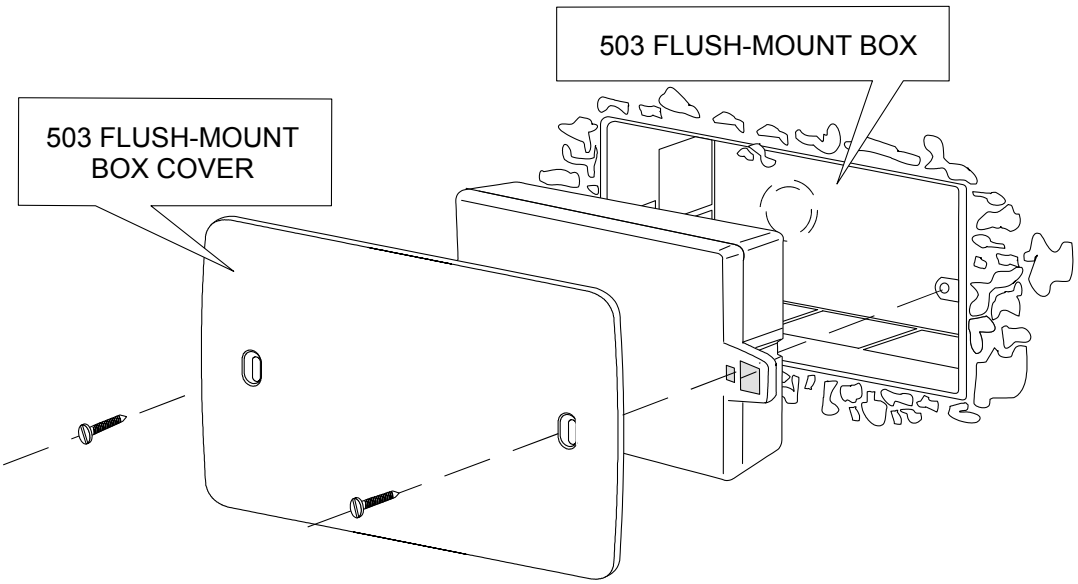
4. OVERVIEW AND WIRING DIAGRAM

WARNING: during wiring and installation procedure, make sure panel and loop are disconnected from power.



5. FLUSH-MOUNT DIAGRAM



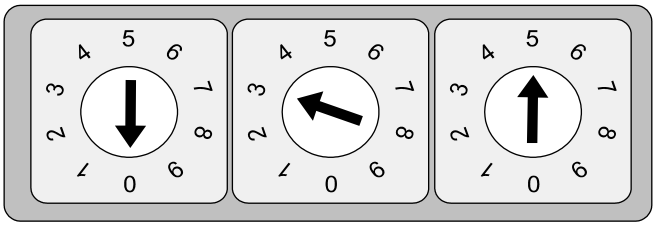
6. ID ADDRESS SETUP

The setup procedure of **1IASBOX** module ID address is very easy: it is equipped with three rotary dip switches corresponding, respectively, to hundreds (x100), tens (x10), and units (x1) of the code to set.

Please consider that code setup is fundamental for the correct identification of the module from the control panel; the module will be detected as one input module.

Example:

1IASBOX module with ID code 035:



IMPORTANT: do not use the ID addresses 0 (zero) and 255.

7. FUNCTIONS SETUP

To setup module functions, use the dipswitch indicated in “OVERVIEW AND WIRING DIAGRAM” on page 4.

Functions are listed in the following table:

Dip Switch	Position	Function
1	**ON**	Balanced input
	OFF	Non-balanced input
2	**ON**	Enables lighting ON (red light) of INPUT 1 LED
	OFF	Disables lighting ON (red light) of INPUT1 LED
3	**ON**	**Not used.**
4	**ON**	**Not used.**
5	**ON**	**Not used.**
6	**ON**	**Not used.**

8. DISPOSAL INSTRUCTIONS

Dispose of analogue addressable module 1IASBOX in compliance with current city regulations and by leaving the device in a dumping ground that is authorized for the disposal of electronic products.

If required, please contact the appropriate city office for additional information.

The materials used for this product are very harmful and polluting if dispersed in the environment.

9. CONTENTS

1 Input Analogue Addressable Module - TECHNICAL MANUAL - **1IASBOX**
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