

CPD certification
n° 0051 - CPD - 0276



EL.MQ.
GLOBAL SECURITY SOLUTIONS

1 Output Analogue Addressable Module

10ASBOX

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 Output 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 destined 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

1OASBOX 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 relay output.

The module can be connected to control a magnetic door retainer, an optical-acoustic fire alarm device, a luminous panel, and to trigger several devices (Sprinkler, explosive charges in skylight automatic opening systems, devices to cut power supply or gas supply, etc.). Relay contacts current carrying capacity is 2A@DC30V. The relay output can be programmed to control an optical-acoustic alarm device with supervised line.

The relay activated status is indicated by a two-colour LED: steady red light indicates that the output is active, blinking green light indicates that the communication between the output and the panel is correct, blinking red light indicates that no 24V power is supplied (when the supervised output is selected).

1OASBOX 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.

1OASBOX 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:	1OASBOX
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, relay outputs, signals communications and serial loop connection.
LED indicators:	(on board) two-colour LED indicator for relay output active and communication status.
Controls:	rotary dip switches to set ID address. 6-pin dip switch to set operating functions.
Relay contacts carrying capacity:	0,5A@AC125V - 2A@DC30V.
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 resistor (1 x 5K6Ohm).

3. PRODUCT COMPLIANCE

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

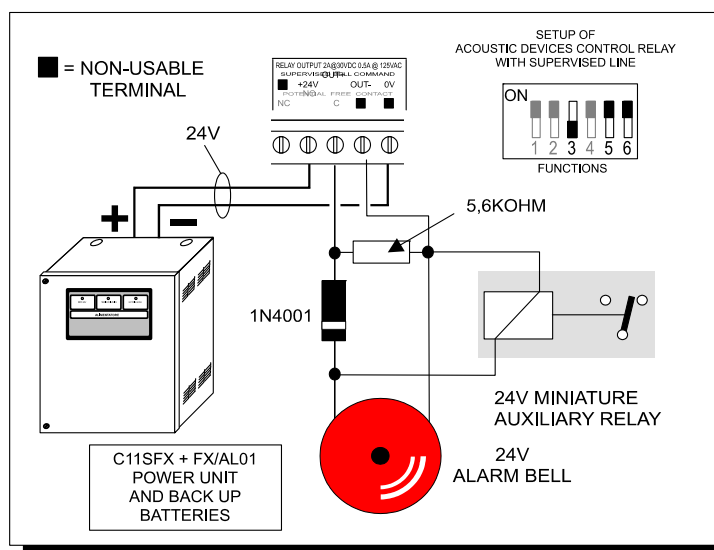
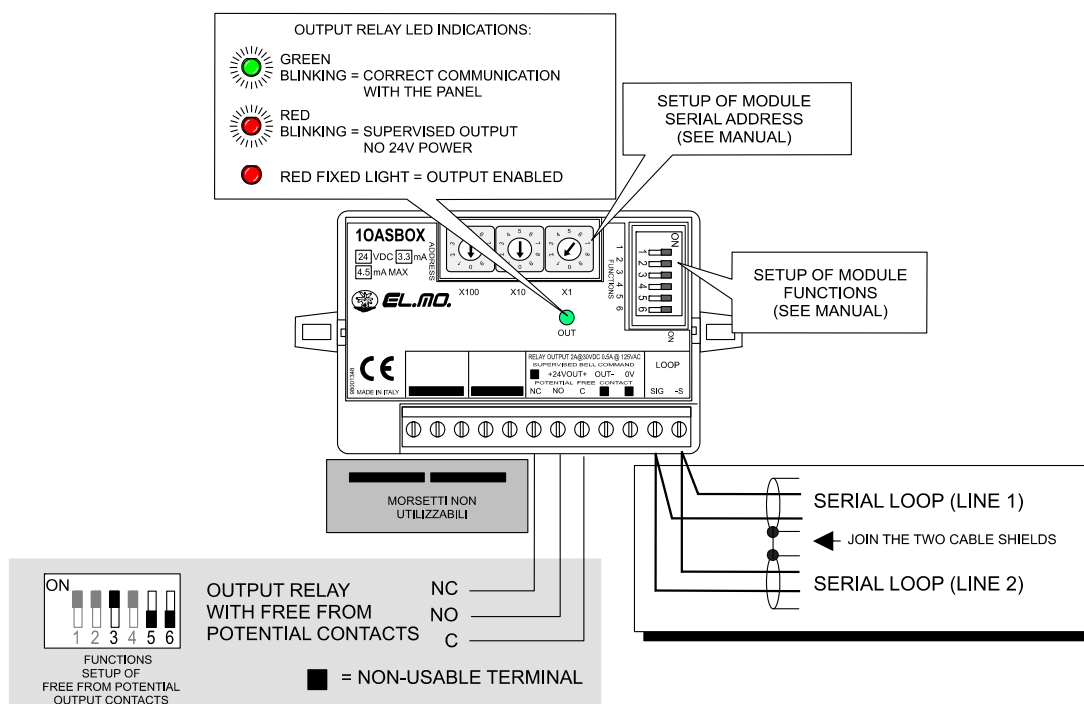
1OASBOX module is also compliant with EN54-18 standard.

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4. OVERVIEW AND WIRING DIAGRAM

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

**WARNING**

Automatic activation function upon power failure is not active: the relay will not activate when the panel is switched off for maintenance sessions.

It is strongly recommended not to enable automatic activation function when the output is connected to a device that might cause damage if activated by mistake.

In this case, according to the application, the relay activation may be dangerous since it could, for example, trigger explosive charges in skylight automatic opening systems.

When the activation of this function is required, open the module housing and cut the jumper wire as illustrated in the following paragraphs.

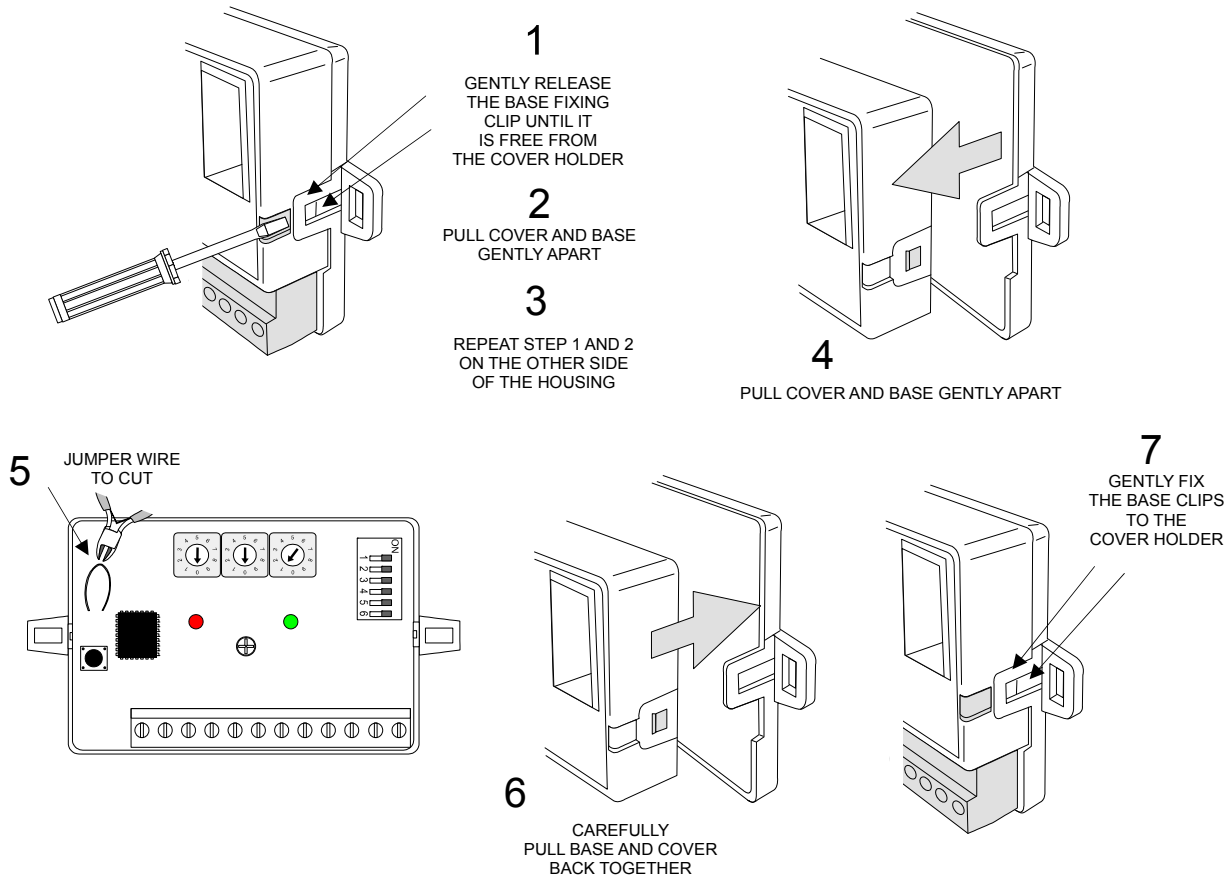


5. ADJUSTMENT OF RELAY OUTPUT OPERATING MODE

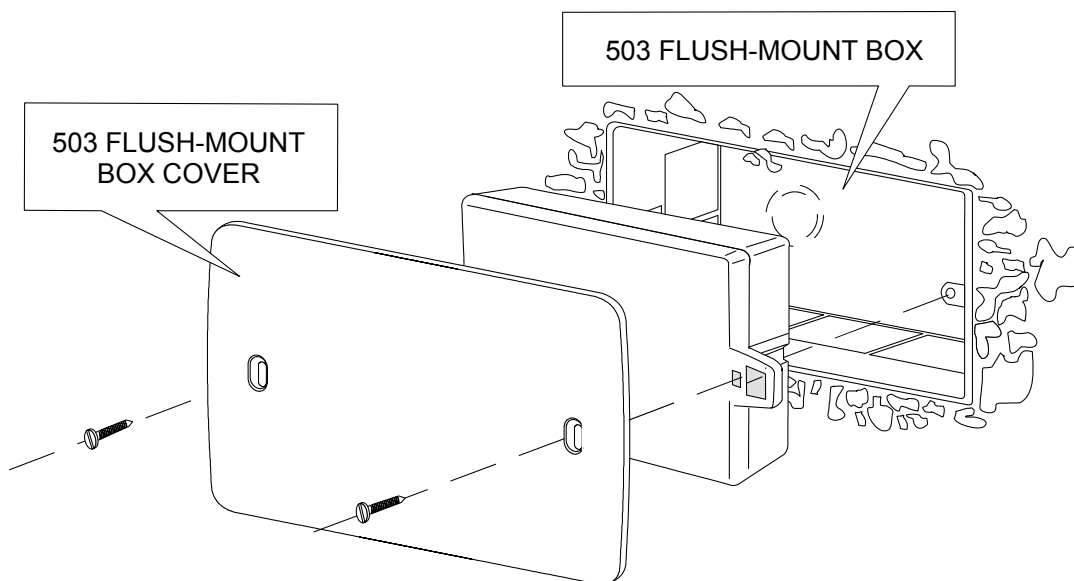
Steps to adjust the output relay function in order to set automatic activation in case of power failure:

- open module housing: carefully open the side fixing clips;
- cut the coloured jumper wire on the left side of the microprocessor;
- when finished, close the module housing by closing the side fixing clips.

Please pay attention not to damage the fixing clips when opening the module:



6. FLUSH-MOUNT DIAGRAM



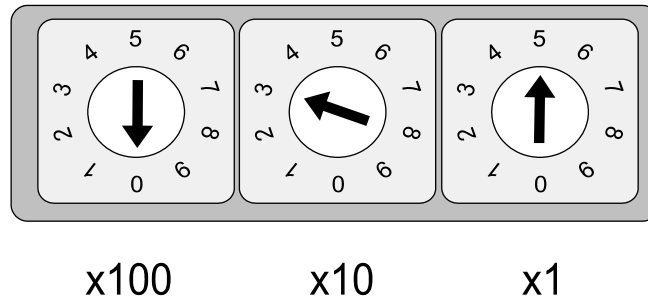
7. ID ADDRESS SETUP

The setup procedure of **1OASBOX** 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 output module or bell control module.

Example:

1OASBOX module with ID code 035:



If you have to connect another module, set its address starting from 036.

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



8. 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	Not used.
2	ON	Not used.
3	ON	Relay output contacts are free from potential (set dip switch 5 and 6 to OFF)
	OFF	Relay output is set to control optical-acoustic devices over supervised control line (set dip switch 5 and 6 to ON)
4	ON	Not used.
5	ON	Set it to ON (also dipswitch 6) when dipswitch 3 is set to OFF
	OFF	Set it to OFF (also dipswitch 6) when dipswitch 3 is set to ON
6	ON	Set it to ON (also dipswitch 5) when dipswitch 3 is set to OFF
	OFF	Set it to OFF (also dipswitch 5) when dipswitch 3 is set to ON

Note: when 1OASBOX module relay output is set to control optical-acoustic devices over supervised control lines, the module will be detected as a *bell control module* and the related output can be silenced from the control panel.

9. DISPOSAL INSTRUCTIONS

Dispose of analogue addressable module 1OASBOX 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.



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