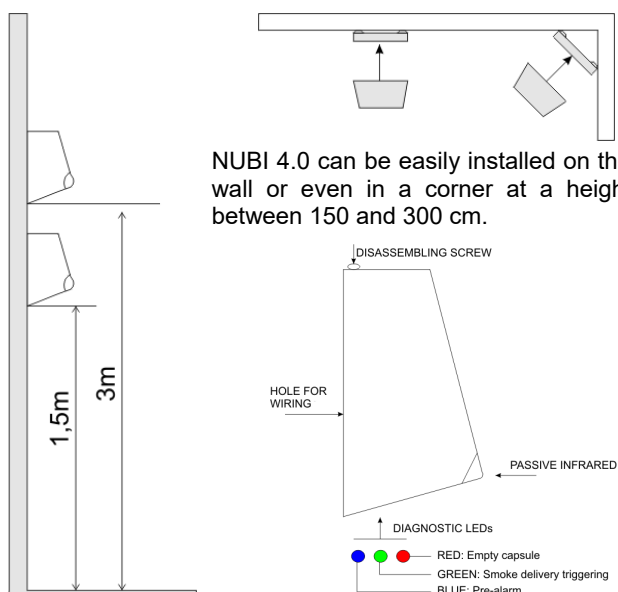# 1. NUBI 4.0 F1

Thank you to purchase of NUBI 4.0, the intelligent smoke machine able to be connected to any burglar alarm system in new or existing systems. Thanks to the integrated intelligence and the infrared motion sensor, NUBI 4.0 drastically reduces the activations due to false alarms. The device is 12 V DC powered, usually supplied by the alarm control panel, the current consumption is only 10 mA. NUBI efficiently protects volumes up to 100 m^3. The smoke generated by NUBI 4.0 is based on incense and does not produce toxic atmosphere as tested according to the TLV-STEL directive EU 2017/164 and ACGIH. After use the room must be ventilated before staying there.
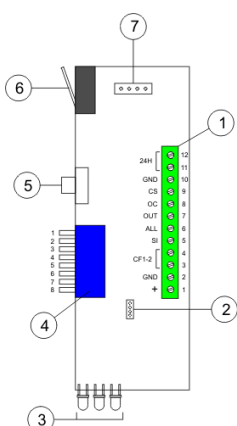
2. INSTALLATION

NUBI 4.0 can be easily installed on the wall or even in a corner at a height between 150 and 300 cm.

DISASSEMBLING SCREW

HOLE FOR WIRING

PASSIVE INFRARED

DIAGNOSTIC LEDs

RED: Empty capsule
GREEN: Smoke delivery triggering
BLUE: Pre-alarm

A single upper screw allows disassembly between the base and the top cover.

3. MOTHERBOARD

Main elements placed on motherboard are:

1) Main connector
2) Integrated passive infrared connector.
3) Diagnostic LEDs
4) DIP Switches
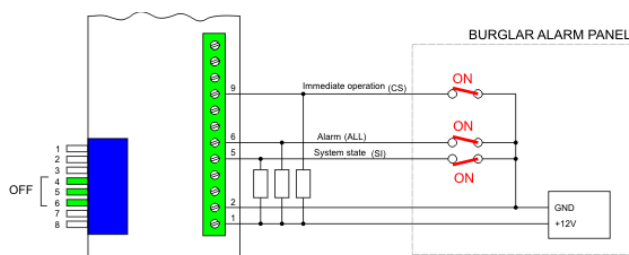5) Walk test button
6) Tamper switch
7) Reserved connector.

4. Main connector

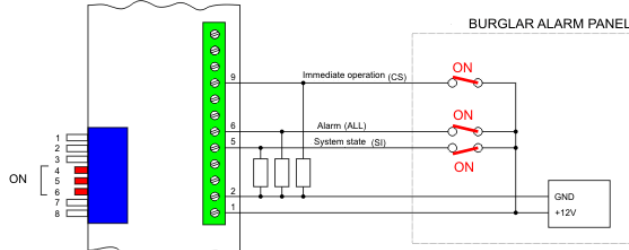|		
1	+12V	Power supply + 12VDC
2	GND	Power supply GND
3	CF1	Smoke capsule
4	CF2	
5	SI	System state (input)
6	ALL	Alarm (input)
7	OUT	Empty capsule (output)
8	OC	Alarm (output)
9	CS	Immediate action (input)
10	GND	GND
11	24H	Tamper switch
12	24H	

NOTICE: Always connect the supplied 33K resistance to +12V or GND to the SI, ALL and CS inputs, depending on the polarity chosen.
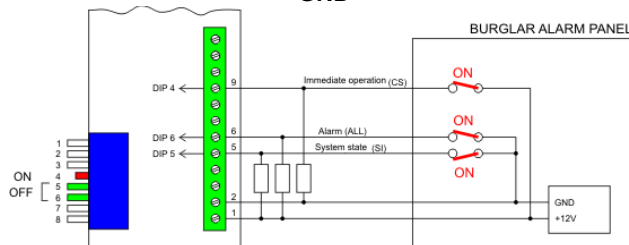
5. INPUTS POLARITY

With alarm panel outputs active at GND

With alarm panel outputs active at +12V

Some alarm panel outputs active at GND, others at GND
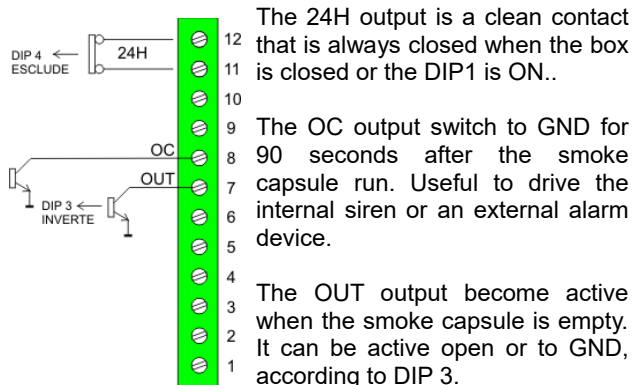
Keep out of reach of children, away from open and dry flames.

6. DIP SWITCHES

DIP	ON	OFF
1	Tamper disabled	Tamper active
2	Not used	Not used
3	OUT active to GND	OUT active open
4	CS input active at +12V	CS input active at GND
5	SI input active at +12V	SI input active at GND
6	ALL input active at +12V	ALL input active at GND
7	Power ON	Power OFF
8	Smoke enabled	Smoke disabled

7. DIAGNOSTIC LEDs

BLUE	Lampeggia durante il periodo di preallarme.
GREEN	A brief flash indicates the triggering of the smoke capsule. Useful during installation.
RED	Reports the smoke capsule is empty.

8. OUTPUTS

The 24H output is a clean contact that is always closed when the box is closed or the DIP1 is ON..

The OC output switch to GND for 90 seconds after the smoke capsule run. Useful to drive the internal siren or an external alarm device.

The OUT output become active when the smoke capsule is empty. It can be active open or to GND, according to DIP 3.
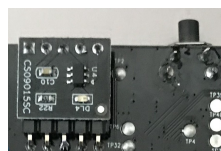
9. WALK TEST

Press the Walk Test button to activate the diagnostic function for 10 minutes to turn on the blue LED every time the passive infrared detects movement. This allows to position the device to obtain the maximum coverage of the built-in infrared. When the Walk Test mode is active, the next press of the button will stop it.

10. VALIDATION BOARD

The validation card is plugged to the mother board and must be replaced together with the smoke capsule after each use. A flash of the red LED indicates that the capsule is not exhausted.
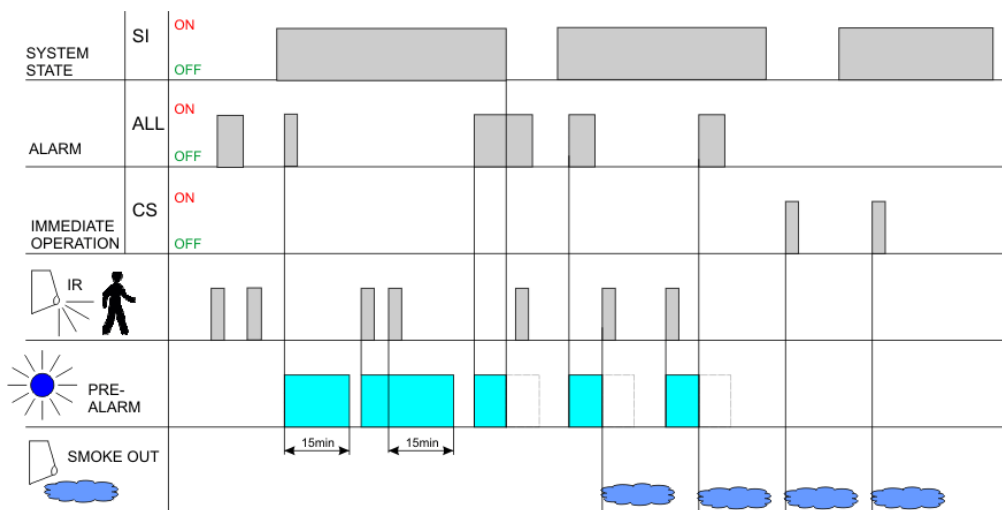
11. COMMISSIONING

IMPORTANT: Keep OFF the DIP 7 and 8 during wiring. Set DIP 7 to ON to power the board and carry out the tests, only at the end of installation job put ON the DIP 8 to enable the smoke capsule.

The simulation tests of the smoke delivery keeping the DIP 8 in the OFF position, can only be performed **within 4 hours from the power supply of the board**, after which the validation board will be irreparably consumed. It is therefore recommended to switch OFF and ON again the device with DIP 7 as the first thing to do in case of maintenance to a device installed for a long time.

Before the final commissioning, it is advisable to carry out both the Walk Test and some real simulations, with the DIP8 in the OFF position, where the green LED will emit a short flash that simulates the ignition of the fumigation capsule.

At the end of the installation, remove the adhesive that protects smoke exit hole of the smoke cartridge.

12. WORKING LOGIC

NUBI can be driven only with CS input (immediate discharge), or using the SI and ALL inputs in conjunction by the integrated infrared sensor. The operating logic is shown in the following diagram:

SMARTEK

13. MAINTENANCE

We recommend replacing the smoke capsule every 5 years using only the original replacement.

14. INDICATE THE INSTALLATION

In accordance with local laws, it may be mandatory to report the presence inside a room of one or more security smoke systems. Apply the warning label near the normal access point to the room.
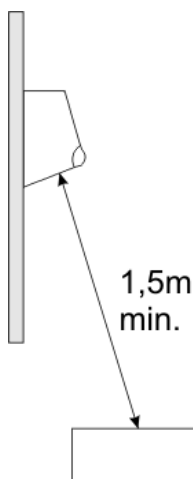
15. NOTIFICATION TO THE AUTHORITIES

In accordance with local laws, it may be mandatory to notify the competent authorities the installation of one or more security smoke systems.

16. WARRANTY

SMARTEK s.r.l. It guarantees its products against all manufacturing defects for a period of 30 months from the production date shown on the label.

17. RECOMMENDATIONS

Install in a dry place, under 70% of relative humidity. In installations in more humid environments do not remove the adhesive that protects the smoke outlet.
The device must be handled by qualified technician.
Do not place any objects on the smoke exit hole for a distance of at least 1,5 meters.
Before leaving, ventilate the rooms thoroughly after the smoke has been delivered.

1,5m min.

18. LIMITATION OF LIABILITY

SMARTEK srl is not responsible for any use of the product that does not conform to its recommended use or for installations that do not comply with the indicated guidelines.
SMARTEK srl can not be held responsible for thefts suffered in environments where the NUBI product is installed, regardless of whether or not it has been activated.
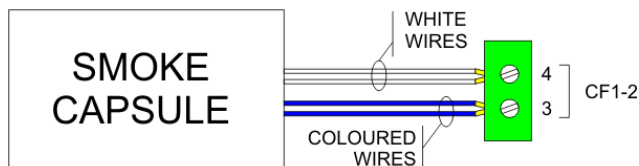SMARTEK srl can not be held responsible for any direct or indirect damage caused by the supply of smoke.

19 TECHNICAL SPECIFICATIONS

Power supply	12VDC ±15%
Consumption	10mA
Size	9cm x 14cm x 8cm
Saturable volume	100m^3
Weight	760g
Smoke average delivery time	25sec
Operating temperature	From 0°C to +45°C
Storage temperature	From -20°C to +55°C
Maximum relative humidity	70%
Inputs	SI – System state ALL – Alrm CS – Immediate action
Outputs	24H – Tamper OC – Alarme OUT – Empty capsule

20 WIRING SMOKE CAPSULE

At the end of installation the smoke capsule mus be wired to the main connector screw terminal 3 and 4. The smoke capsule has not polarity but the two white wires must be wired together, the same for coloured wires, as showed in the picture.

SMOKE CAPSULE — WHITE WIRES — 4, 3 — CF1-2 — COLOURED WIRES

IMPORTANT: When the smoke supply will start, it will continue until the capsule will be completely exhausted.

C E