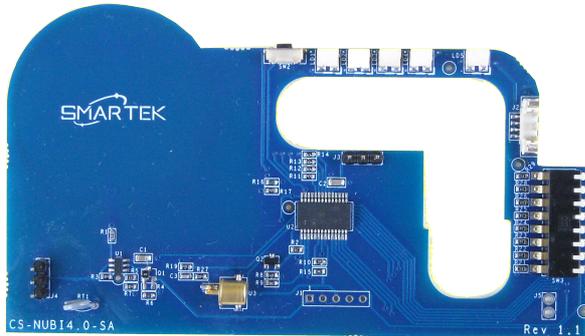


## NUBI 4.0 advanced tamper add-ons



Add-ons for NUBI 4.0, compatible with both 12VDC and 3.6V battery powered models. It contains the protections against the following tampering attempts:

1. Removal - Shock
2. Proximity
3. Overheating
4. Foam

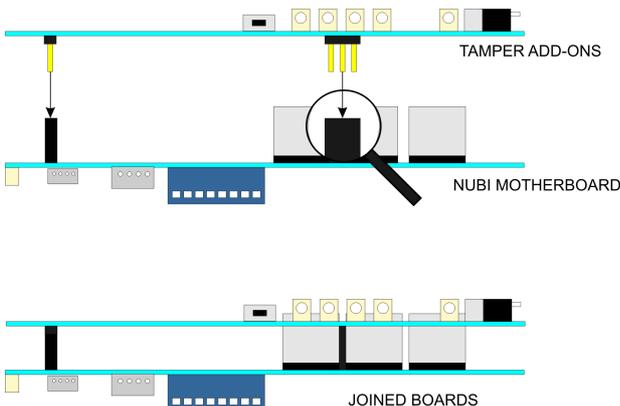
Each function can be activated individually by DIP SWITCH, thus optimizing performance and consumption.

To use the anti-foam protection, it is also necessary to purchase the special NBTMS accessory.

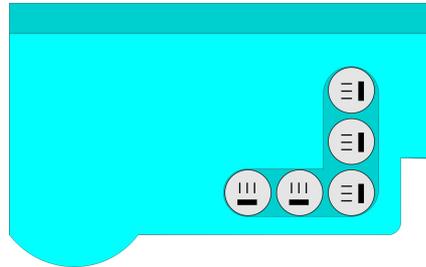
The tampering attempt is reported to the alarm system through the normally closed 24H output on the NUBI 4.0 motherboard.

### Assembling:

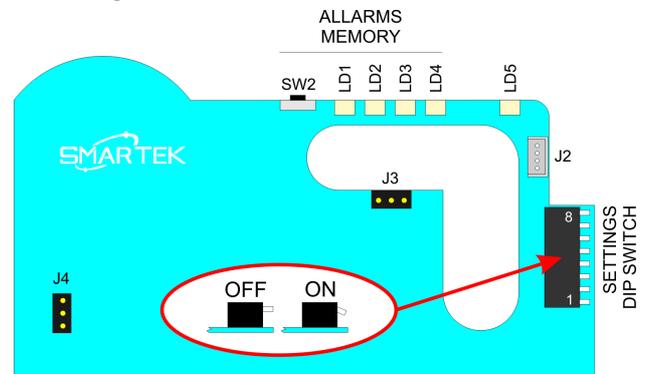
Join the add-ons card to the NUBI 4.0 motherboard using the appropriate connectors, as shown in the figure, making sure to enter all the PINs correctly.



The capacitors on the back of the NUBI 4.0 motherboard should protrude slightly through the special slot on the add-ons board, as shown in the figure.



### Settings:



Settings are made via DIP switches. The position is ON when the tongue is inclined towards the printed circuit.

DIP SWITCH SETTINGS			
#	Function	OFF	ON
1	Proximity	NO	YES
2	Shock	NO	YES
3	Anti Foam	NO	YES
4	Overheating	NO	YES
5	Not used	-	-
6	Shock sensitivity	Low	High
7	Foam sensitivity	Low	High
8	Heat sensitivity	Low	High

### Alarms memory:

A short press of the SW2 button displays the status of the alarm memory on the LD1..LD4 LEDs, while a pressure of about 3 seconds resets it and inhibits the alarms for 3 minutes, so as to be able to close the device's box without generating alarms.

The display of the alarm memory is preceded by a brief flash of all the LEDs, after which the following signal on each LED remains active for 4 seconds:

**LED OFF:** No event in memory  
**LED ON:** Recent event, occurred in the last 3 minutes  
**LED FLASHES:** Past event.

LED	Color	Alarm memory
LD1	White	Proximity
LD2	Green	Shock
LD3	Blue	Foam
LD4	Yellow	Overheating

### Anti foam sensor:

To obtain this protection it is necessary to replace the back part supplied with NUBI 4.0 with the NBTMS accessory, which is equipped with a special sensor and its connection cable to be inserted in connector J2 of the tamper board.



*NBTMS Accessory*

### Proximity sensor:

The main goal of the proximity sensor is to detect the presence of hands near the product.

The most sensitive area is in the lower left corner, looking at NUBI in front, near the antenna. The range is about 6 cm.

This specific function has a significant power consumption for use with the battery version, when activated it reduces its life to 3 years.

### Tamper alarm output:

Tamper alarms are sent to the alarm system through the 24H output on the NUBI motherboard terminal board. When the box is closed and in the absence of tamper alarms, the 24H terminals is a closed contact. When a tamper event occurs, the 24H contact opens.

When the tamper card detects an alarm, the red LED LD5 lights up for the whole duration of the event.

### Compatibility:

This accessory is compatible with the following NUBI 4.0 models:

- NB40F2 12V with PIR
- NB40S1 12V without PIR
- NB40LP1 3,6V with PIR
- NB40LPS1 3,6V without PIR