# Stay awake switch + GSM



## Innovative Electronics for a changing world

Manual

STAY-AWAKE SWITCH for Security Control Rooms

Model: Stay awake switch + GSM



## **System Description:**

The Micro Instruments STAY AWAKE SWITCH + GSM is a device used to keep personal awake that performs important duties, security personal at security control rooms or control points and to alert supervisors via **SMS message** and **missed calls** about certain conditions not met.

The system should always be wall mounted away from desks and chairs so that personal have to get up and walk to reset the system.

### Features:

Internal battery charger with battery backup

16Vac power supply from standard alarm transformer for user safety

1 to 5 cell numbers can be added to the system

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## Working principle:

The unit is housed in a metal wall mountable enclosure and comes with a standard 16Vac external alarm power supply so no dangerous voltages is near the user device with an **internal charger** circuit and internal **battery backup** to function during power outages.



### Normal operation:

The Stay awake switch runs a random timer between 2 minutes and 18 minutes

Once the random time ran out the piezo buzzer will sound and an led will light up, the system will warn in 10 seconds again, then in 9 seconds then in 8 sec etc. from 4 second warnings the sound duration will be longer to indicate the importance to reset the device, personal have to walk to the unit to reset the device, reset will be acknowledge by a short sound and the led will switch off.

Failure to reset will initiate a **missed call to cell number 1** in the number list and a SMS message to all numbers indicating "Failed to reset the deadman switch"

Every time after personal have reset the system a new **Random time** will be generated between 2 and 18 minutes after which the system will warn to reset again.

#### **Silent Panic**

During normal operation the user can press the button and keep it pressed for 2 seconds, a short sound pulse will be heard to confirm the panic situation.

The system will send "Panic alarm from deadman switch" to all numbers

#### Mains power outages:

When mains power is lost the system will send "Mains power off" to all cell numbers

System will run on internal battery power, should the battery fall below 11.5V the system will send a "Battery low voltage " SMS to all numbers

When mains power is restored the system will send a SMS message to all numbers "Mains power on"

When the internal battery runs low a SMS to all numbers will be generated" Battery low + the current battery voltage"

\*\*The system will send a Self test SMS once every 2 weeks to cell number 1 to keep pre-paid sim cards from expiring if not used

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## Setup:

 Open the system and insert a sim card into the sim holder, the sim card should have the pin code request turned off. Please make sure the sim card have airtime loaded or airtime and SMS bundle.

SMS will be deducted from airtime if no SMS bundle is available but the system requires airtime to make the missed calls.

2. Press the reset switch on the GSM (next to the 10Way IDC connector) - hold the switch pressed

Plug in the 2 way power connector to the GSM pcb, hold the switched pressed until the red led next to the switch flash extremely fast. Release the switch.

- 3. Notice the yellow led on the GSM will lite up and the green will flash, after about 5 to 10 sec the green led will start to flash slower (indicating a successful connection to a cell provider tower)
- 4. Send the word **Save** from the cell number that needs to be in number 1 position (this number will get missed calls and SMS messages)

Wait for a return SMS "Number saved" from the GSM

5. To add a 2<sup>nd</sup> up to 5 cell numbers, send the word **Save** from the other cell phones one at a time and wait for the reply SMS "number saved" before saving the next number

#### Additional SMS commands:

Sending the word Sig will return the signal quality of the GSM connection

Sending the word **Stat** will return the status of the system, battery voltage and mains on / off status

Sending the word **Help** will return a list of SMS commands

Sending the word **Balance** will return the balance of funds on the SIM card

Sending the word **BI10.5** will change the Battery low voltage level to 10.5V

Sending the word List will return a list of cell numbers saved on the system

Sending the word **Delete2** will delete cell number 2 from the system – command valid for 1 to 5

#### **Specification:**

Battery operating time +- 2 days without 220Vac power

#### **Sound output:**

Buzzer = 95dB at 30cm distance

L = 177mm

W = 142mm

H = 47mm

Weight = 1.4Kg