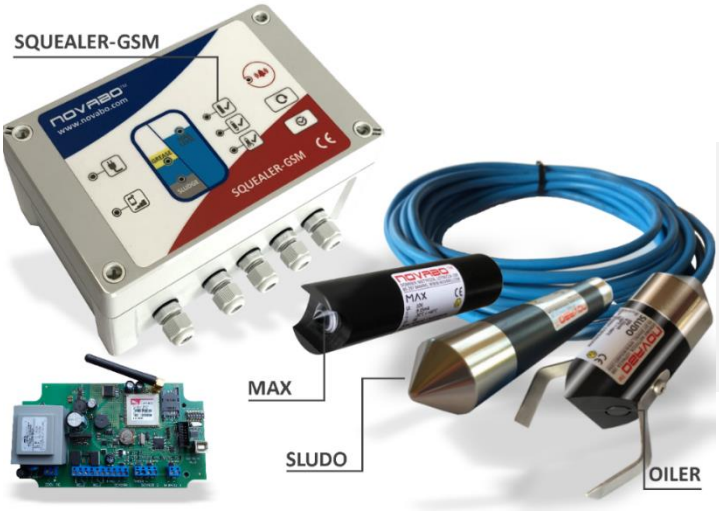
SQUEALER-GSM – manual



- 3 inputs
- 3 output
- PS 230V
- battery input

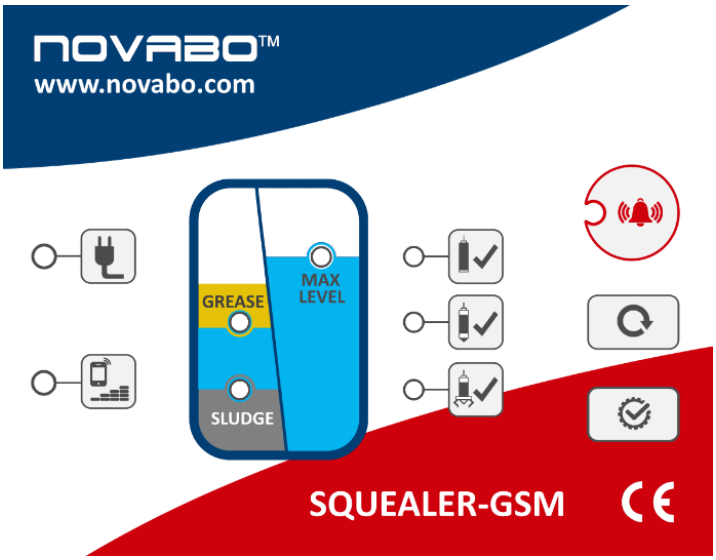
The alarm module, powered by 230V, is used to measure and control the level of the sludge layer, oil substances, grease, petroleum substances and overflow of the tank.

⚠ To avoid problems in operating the unit, it is recommended to read this manual thoroughly before using it. Do not interfere with construction or carry out repairs yourself. Maintenance or repair work should be carried out by qualified personnel (installer or company service). The manufacturer assumes no responsibility for any damage resulting from improper assembly, malfunction (device, software) or damage to the controller.

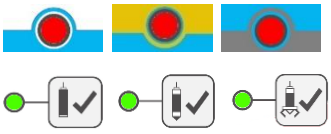
Description

SQUEALER controller is a modern microprocessor device for continuous monitoring of the status of selected probes (MAX, OILER, SLUDO). The basic parameters of the controller are 3 inputs, 3 relay output, LEDs indicating normal state, failure status and alarm status, buzzer generating an alarm signal, alarm output, relay output, activated at the time of alarm.

Front panel description



- LED lights continuously when the power of the device is ON.
- the number of the LED flashes indicates the GSM signal strength (max. 4 flashes).



- LED lights when the probe detects ALARM
- LED is ON constantly, when the sensors are connected and the dipswitches are properly set. Blinking LED indicates an alarm sensor.

- The alarm is shown by the steady light of the red LED + acoustic signal.

- A short press [<1] s button - delete the buzzer alarm. Long press button [> 2s]- clearing the alarm and restore the relay to the state without an alarm.

- Checking the optical and acoustic signals and relay outputs. Test can be activated only when there is no alarm sensors. Each time you press the button activates / deactivates the function test.

Cooperating Devices

MAX - optical probe for overflow or maximal level.

OILER - thickness measurement of fat, oil, mineral oil, organic, petroleum substances.

SLUDO - detecting the sediment layer in the separator or the maximum level

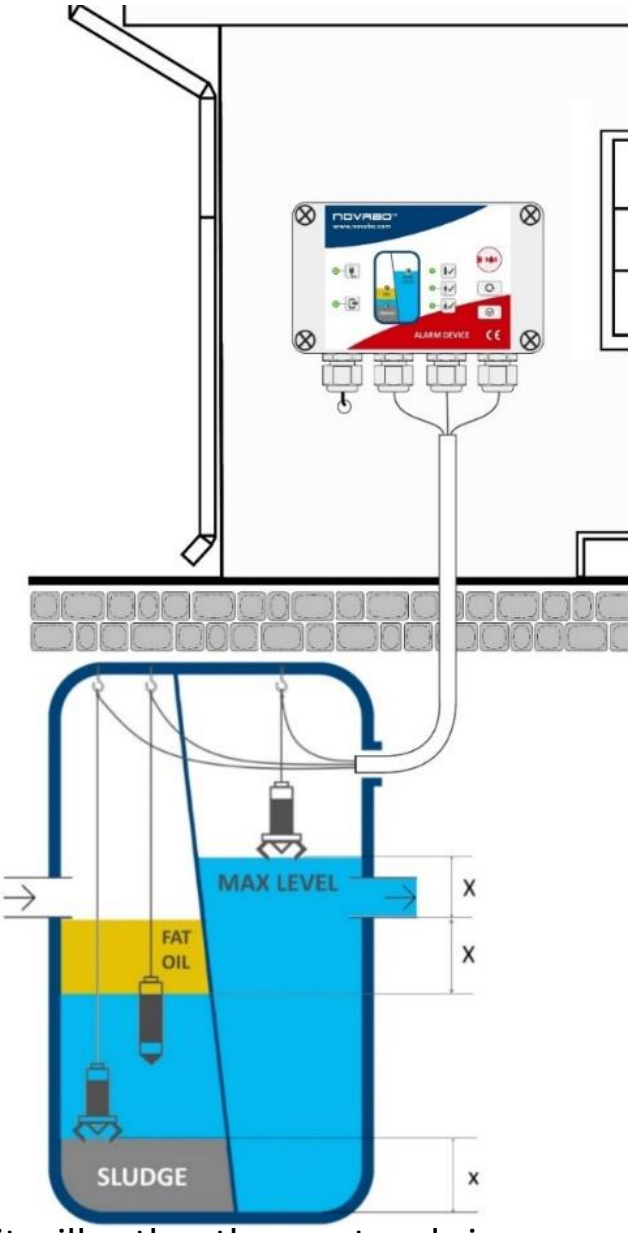
COUPLER-01 – hermetic coupling plug

NFIX-01 – set for mounting the probe

CABLE-5, CABLE-10 – sensor extension cable

Probes assembly

- Lower the sensor so that the measuring point is at a exceeding level.
- Attach the sensor cable to the mounting bracket NFIX.
- Use the COUPLER connector to lengthen the cable



MAX sensor

The probe with a standard length of 5 m should be hung on the FIX holder, which should be placed directly under the manhole - preferably in the inspection hole in the separator cover.

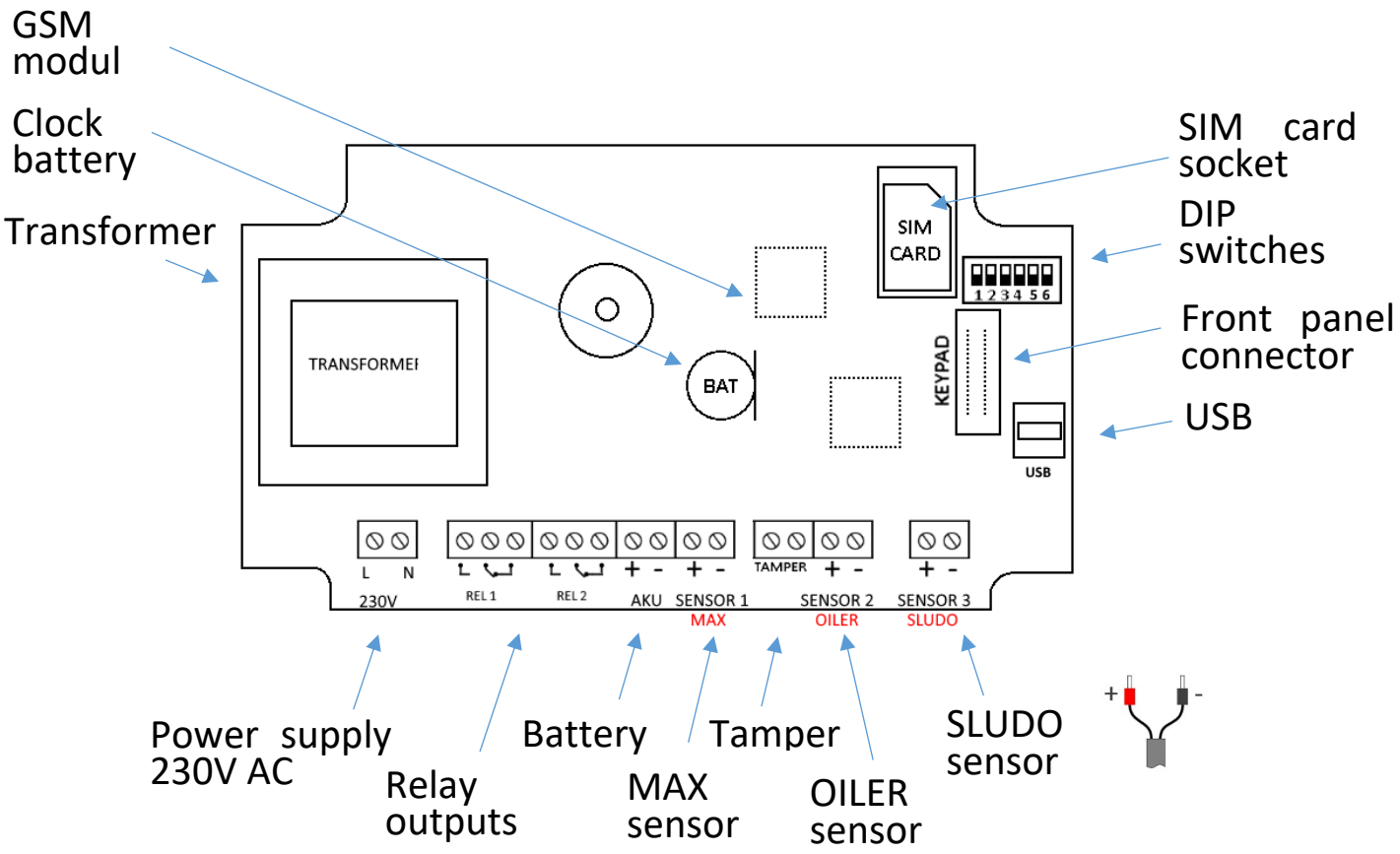
OILER sensor

The probe should be placed at the appropriate depth / height and the sensor cable should be wound around the mounting eye (FIX) in such a way that the cable is blocked and the probe does not change its position on the handle during operation.

SLUDO sensor

The mounting height of the sensor depends on the volume of the sludge in the separator. The amount of accumulated sludge can not exceed 1/3 ÷ 1/2 of the height between the bottom of the outlet pipe and the bottom of the tank. When installing the sensor, it should be noted that the deposit usually accumulates in the measurement zone at different heights, which depends mainly on the speed of the flowing sewage. Where the flow velocity is the smallest, it will gather the most and vice versa. Connect the probe with a 5 m standard cable to the holder. The handles should be placed directly under the hatch - preferably in the inspection hole in the separator cover.

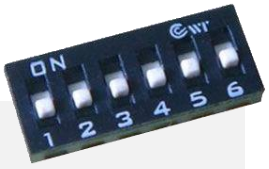
Description of controller connectors



Programming from PC

a) visit WWW.NOVABO.COM
b) install the driver for the USB cable:
www.novabo.com >>> products >>> USB driver
c) Install the NCONFIG program:
www.novabo.com >>> products >>> Nconfig

DIP SWITCH configuration



DIP1	"ON" - SENSOR MAX active - probe 1 connected "OFF" - SENSOR MAX inactive - probe 1 not connected
DIP2	"ON" - SENSOR OILER active - probe 2 connected "OFF" - SENSOR OILER inactive - probe 2 not connected
DIP3	"ON" - SENSOR SLUDO active - probe 3 connected "OFF" - SENSOR SLUDO inactive - probe 3 not connected
DIP4	"ON" - alarm delay time from the input 30 sec (recommended) "OFF" - alarm delay time from the input 5 sec
DIP5	"ON" - inverse input logic SENSOR 1 (15mA - normal) "OFF" - normal input logic SENSOR 1 (9mA - normal)
DIP6	"ON" - alarm on 3 relays parallel "OFF" - alarm on 3 relays separately IN1->OUT1, IN2->OUT2, IN3->OUT3

Technical Data

Supply voltage	230V
Max. fuse	1.25A
Power (nominal)	2.2 VA
Output:	NO/NC relays potential-free, 2A/120VAC or 2A/24VDC
Ambient temperature	-30°C ÷ +60°C
Degree of protection	IP 65
Dimensions without glands	187x122x90mm
Cable glands	M12, cable dimensions Ø 4.0-6.0 mm
Mounting method	Vertical
CE conformity	Directive EMC 2004/108/WE EMC/immunity: PN-EN 50130-4:2012, PN-EN 61000-6-1:2008 EMC/ immunity: PN-EN 55022:2011, PN-EN 61000-6-3:2008+A1:2012

Instructions for safe use

The device should be used for its intended purpose. Before installing, please read the device's instructions. Check its technical condition. Ensure that there is no mechanical damage to the housing and cable. During maintenance work, the device must be disconnected from the power supply.

When installing in places with a potentially explosive atmosphere, comply with the regulations in force in your country. When servicing, checking and repairing in explosive atmospheres, the national standards must be observed.

Checks and inspections

The manufacturer recommends inspections of the entire system once every 6 months or during the emptying of the separator. For this purpose, download, print and complete the **PeriodicReviewCard.pdf**:

www.novabo.com >>> products >>> downloads >>>> **PeriodicReviewCard.pdf**

During the inspection, clean the probe and check that it has no mechanical damage. Then, perform an operation test in cooperation with the SQUEALER controller.

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