SQUEALER-3 – 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.

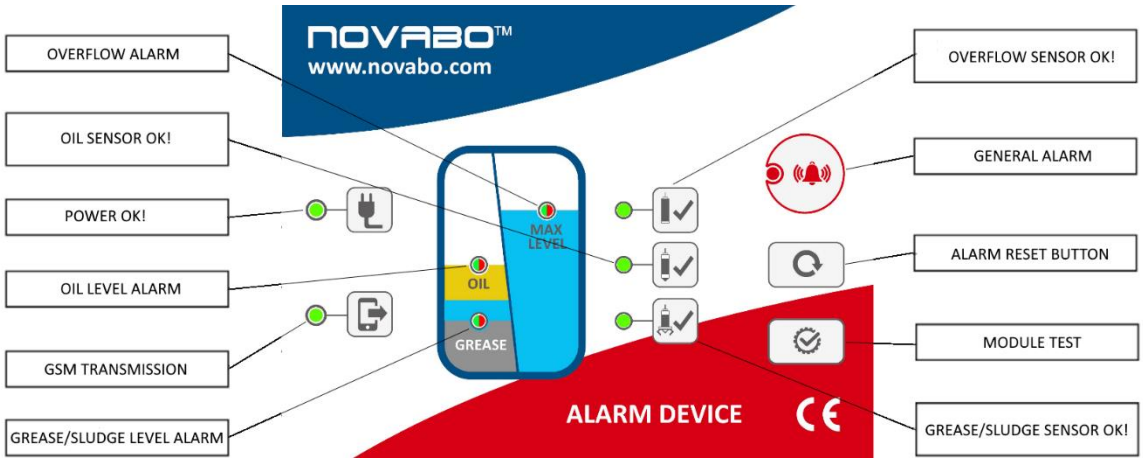
WARNING

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.

System description based on SQUEALER controller.

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.



- blue LED lights continuously when the power is ON

- 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.

Technical data

- Power: 230V AC
- Max. fuse: 1.25 A
- Power Consumption (nominal): 2.2 VA
- Output: NO/NC potential-free relays, 2A/120VAC or 2A/24VDC
- Ambient temperature: -40 to + 60 ° C
- Mechanical strength: IK 07
- Housing dimensions(without glands)(HxWxD): 187 x 122 x 90 mm

Cable glands for probe inputs, power supply, additional gland: M12, cable dimensions Ø 4.0-6.0 mm

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

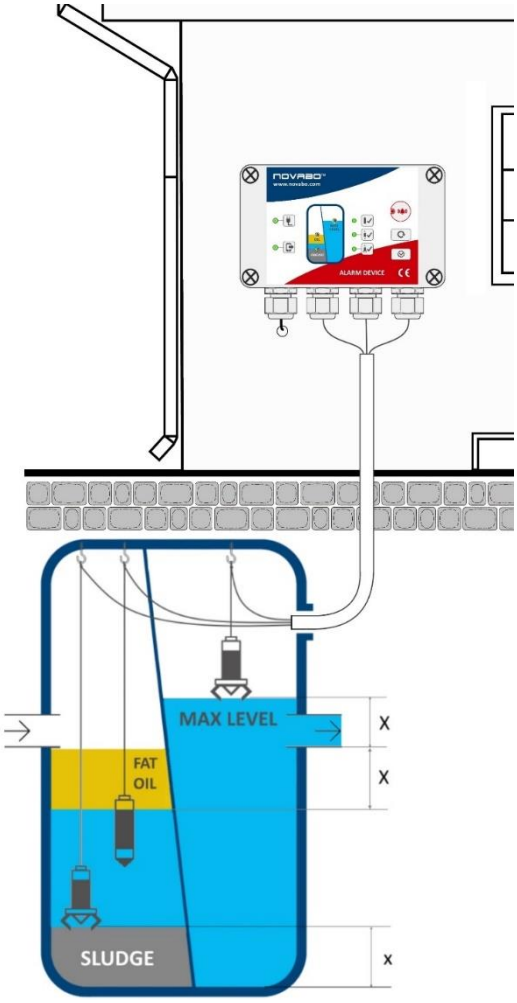
NFIX-01 – set for mounting the probe

CABLE-5, CABLE-10 – sensor extension cable

Probes assembly

The sensor mounting should be carried out as follows:

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

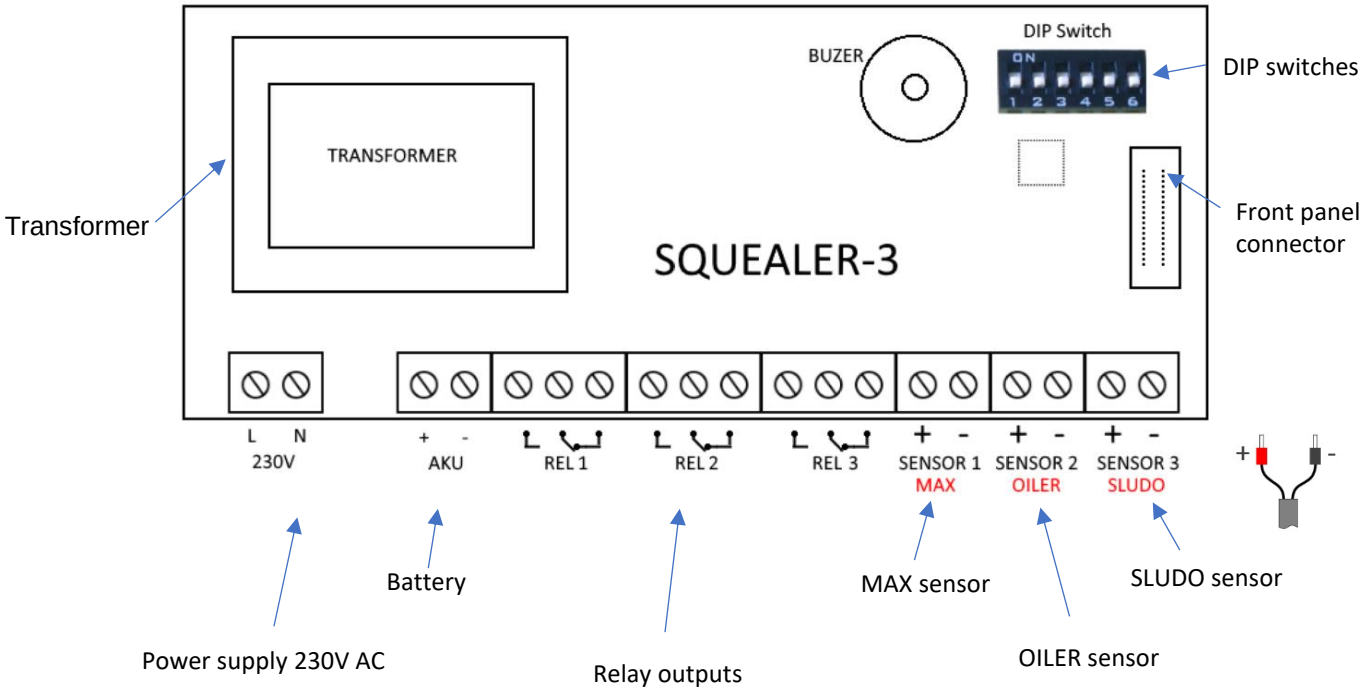
OILER sensor

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

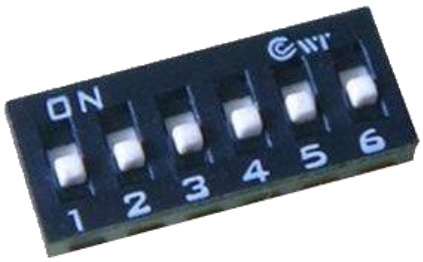
The mounting height of the sensor depends on the volume of the sludge in the separator. The amount of accumulated sludge can not exceed 1/3 ÷ 1/2 of the height between the bottom of the outlet pipe and the bottom of the tank. When installing the sensor, it should be noted that the deposit usually accumulates 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



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 s (recommended) "OFF" - alarm delay time from the input 5 sec
DIP4	"ON" - inverse input logic SENSOR 1 (15mA - normal) "OFF" - normal input logic SENSOR 1 (9mA - normal)
DIP4	"ON" - alarm on 3 relays parallel "OFF" - alarm on 3 relays separately IN1>OUT1, IN2>OUT2, IN3>OUT3,



Control and reviews

The manufacturer recommends inspection the entire system every 6 months, or when emptying the separator. For this purpose, download, print and complete the **PeriodicReviewCard.pdf**: www.novabo.com >>> products >>> downloads >>>> **PeriodicReviewCard.pdf**
During the inspection clean the controller and connected probes, check for mechanical damage. Then perform an electrical and functional test of the operation of all components of the alarm system.