



Installation Manual
SuperSail
Marine Alarm
Marine Alarm Wireless



Table of Contents

1	CONTENTS OF THE PACKAGE	3
2	INSTALLATION	4
2.1	PLACEMENT.....	4
2.2	ENERGY CONSUMPTION	4
2.3	12V CONNECTION	4
2.4	DIRECT CONNECTION.....	5
2.4.1	Connection with SuperSail Fuse Box	5
2.5	CONNECTING WITH SUPERSAIL CONNECTION BOX.....	5
2.6	OUTBOARD MOTOR ALARM.....	6
2.7	CABLE CONNECTED WATER SENSOR.....	6
2.8	WIRELESS WATER SENSOR	6
2.9	WIRELESS MOTION SENSOR	6
2.10	WIRELESS DOOR SENSOR	6
2.11	WIRELESS REMOTE CONTROL	6
2.12	MAINTENANCE	6
2.13	TECHNICAL SPECIFICATIONS	7
2.14	SAFE DISPOSAL	7
3	SERVICE	8

1 Contents of the package

The complete Supersail Marine Alarm basic package consists of the following:

- SuperSail Marine Alarm base (note the serial number of the unit)
- GPS antenna
- Mobile (GSM) antenna
- Quick guide

Add-ons:

- Alarm connection box for cable connection of e.g. 12V and external sensors. Contains also fuse for protection.
- Fuse box for connection of 12V only.
- Cable connected water sensor
- Wireless water sensor (can only be connected to Marine Alarm Wireless)
- Wireless motion sensor (can only be connected to Marine Alarm Wireless)
- Wireless door sensor (can only be connected to Marine Alarm Wireless)
- Wireless remote control (can only be connected to Marine Alarm Wireless)
- Cable connected siren (can only be connected to Marine Alarm Wireless)

2 Installation

SuperSail Marine Alarm is delivered in a box containing the Alarm unit with associated antennas and cables.

The Alarm unit must be connected to 12V external power supply and additional different alarm sensors can be connected.

Keep the packaging in case the Alarm unit has to be sent.

2.1 Placement

The Alarm unit is placed indoor in the boat as high up as possible to get the optimal signal for the GSM antenna to and from the mobile transmitter mas ashore.

The Alarm unit is mounted vertical with the GSM antenna pointing upwards.

The GPS antenna is placed horizontal with the text upwards to be able to receive the optimal signal from the GPS satellites.

None of the antennas must be placed right under metal, since this will reduce the signal strength significantly. Wood, plastic, glass, glass fiber and similar non-conducting materials does not have any significant influence on the signals.

The GPS antenna is magnetic and can with advantage be placed on top of a metal plate or be glued underneath another surface. The GPS text on the antenna has to turn upwards towards the satellites for the best signal.

If the GPS antenna is not placed correct there will be a risk that it can receive reflecting signals from the satellites from time to time and report a false alarm.

The GPS antenna is mounted with the black side (refer to the picture below) turning upwards towards the satellites.



2.2 Energy consumption

In energy mode the Alarm unit uses: 0.6 mA

During operation the Alarm unit uses: 75 mA

During charging the Alarm unit uses: 500mA

The energy consumption during charging is limited in the unit and will never exceed the specified, but can be lower than specified, since the charging circuit is intelligent and fit the charging as required.

The charging stops automatically if the temperature of the Alarm unit exceeds 50 degrees Celsius.

2.3 12V Connection

The Alarm unit is connected to 12V power supply on the primary side of the boats main switch, to ensure that there is always power on the Alarm unit when the boat is shut down and left.

This is a precondition for the Alarm unit to function as secure and insurance approved surveillance of the boat.

2.4 Direct connection

In the below table the connection of the different cables connected to the Alarm unit is shown.

The cables should be connected with pull relief to ensure that the movements of the boat over time do not make the wires lose their connection.

Cable color	Connects to
Grey	No connection
Orange	No connection
Yellow	No connection
Red	Power +12V
Black	Power GND
Green	Activation signal from Input #1 (+12V)
Purple	Activation signal from Input #2 (+12V) – only available for Marine Alarm Wireless
Light blue	Output #1 activation (+12V) – only available for Marine Alarm Wireless
Blue	Output #2 activation (+12V) – only available for Marine Alarm Wireless
White	Output/Input GND

2.4.1 Connection with SuperSail Fuse Box

Since the connection of the alarm system happens on the primary side, the power supply of the Alarm unit must be secured by a 2,5A(T) fuse.

SuperSail Fuse box contains both fuse and connection for 12V battery.

+12V connects to the terminal marked with 12V and 0V to the terminal marked with GND.

Red cable from the Alarm unit connects to the terminal marked with TRK. Black cable from the Alarm unit connects to the terminal marked with GND.



2.5 Connecting with SuperSail Connection box

Refer to Installation manual Connection box, found here: www.super-sail.dk/app-support

2.6 Outboard motor Alarm

If the surveillance of the outboard motor is required a ground wire can be mounted from the motor through wire bundle from the motor. If the wire bundle is cut for instance when theft is happening the alarm will register this and the alarm unit sends an alarm message and will turn on the siren.

Since the input of the alarm detects alarms by enabling +12V at the input, a 1KOhm pull-up resistor should be installed between the input and +12V. The ground wire from the outboard motor connects to the input of the alarm. As long as the ground wire from the outboard motor is intact 0V will be registered on the input to the alarm, but if ground wire is removed the pull-up resistor will ensure that +12V is registered at the input and thus an alarm is activated.

If SuperSail Connection box is used the 1KOhm pull-up resistor is supplied within the box and is connected as shown in the Installation Manual for the Connection box.

2.7 Cable connected Water Sensor

If the boat is equipped with automatic bilge pump the output from the float switch can be connected to for instance Input1 in the Alarm box. Since the bilge pump uses quite some power and is supplied through the float switch, a relay or other current limiter should be installed before connecting to the Alarm box.

As an alternative a separate SuperSail Float switch is connection.

Refer to Installation manual Float switch, found here: www.super-sail.dk/app-support

2.8 Wireless Water Sensor

Refer to Installation manual Wireless Water sensor, found here: www.super-sail.dk/app-support

2.9 Wireless Motion Sensor

Refer to Installation manual Wireless Motion sensor, found here: www.super-sail.dk/app-support

2.10 Wireless Door Sensor

Refer to Installation manual Wireless Door sensor, found here: www.super-sail.dk/app-support

2.11 Wireless Remote Control

Refer to Installation manual Wireless Remote control, found here: www.super-sail.dk/app-support

2.12 Maintenance

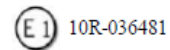
The Marine Alarm system is maintenance free. Repairs should be carried out at an authorized service center.

Cleaning can be carried out with a soft cloth wrenched in lukewarm water

Cleaning detergent containing solvent can harm the unit.

2.13 *Technical Specifications*

Power supply	8-36V DC
Internal backup battery	1000 mAh Lithium
Power use during operation	75 mA ex. possible use from external units connected to digital outputs
Power use energy mode	0.6 mA
Power use while charging	500 mA
Digital outputs	+12V, max. 750 mA
Digital inputs	+12V
Operational temperature	-25 to +55 degrees Celsius
Charging temperature	-10 to +45 degrees Celsius (protection of battery)
Humidity	5-90% non-condensing
Weight	250 g
Protection	IP66
Size	92 x 30 x 58 mm (BxHxD)
Approvals	EN-61000-6-3;2001 Emission EN-61000-6-2;2001 Immunity



Changes may apply.

2.14 *Safe Disposal*



Should not be disposed as domestic waste.

Electronic equipment should be disposed according to the local regulations for electronic and electronically equipment.

3 Service

The Alarm system is on the front equipped with 3 LED.

LED 1 and LED 2 is solely for service purpose and is used in connection with troubleshooting on the unit.

LED 3 can with advantage be used to verify the GPS signal after installation.

LED 1:

Pattern	Description
Fastest flash - green	The unit is initializing during startup
Fast flash – green or yellow	The unit is stopped
500 ms on / 500 ms off green or yellow	The unit is running normally
1,5 s on / 0,5 s off green or yellow	The unit is running normally and the battery is charging
Fast flash red or yellow	The unit is stopped because of an error
Changing fast/slow red or yellow	The unit has lost its firmware
75 ms on / 925 ms off	The unit is running with decreased speed

LED 2:

Pattern	Description
Off	The GSM communication is off
600 ms on / 600 ms off	Initializing the GSM connection
75 ms on / 3 s off	Connected to the GSM no activity
75 ms on / 75 ms off	GPRS session on-going
Fast flash	GPRS data transfer on-going
10 ms on / 8 s off	The unit is in energy saving mode

LED 3:

Pattern	Description
Green	The GPS signal is ok. The GPS is only ON when the unit is active
Red	The GPS signal is missing or low receiver quality