

Nautilarm Installation Instructions

1 - Mount unit

The Nautilarm is splash proof but not water proof so it should be mounted in a protected location where it will not get wet. It can be mounted with screws or adhesive foam pads. If using screws the supplied mounting brackets must be attached to the base of the case using the supplied screws. Ensure that enough space is left around the unit for cable routing. As the system used wireless sensors, it is recommended that the unit is mounted in the vicinity of the alarm sensors being used and that there are no metal bulkheads between it and its sensors.

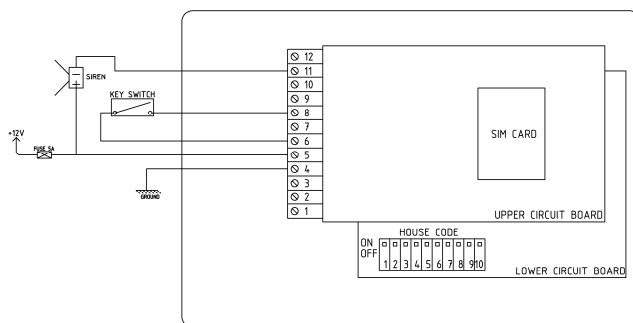
2 - Mount GSM / GPS Antenna

The Nautilarm is supplied with an external bulkhead mounting antenna or an internal antenna. If the system is being installed into a metal boat the external antenna must be used, ideally situated on the roof of the boat. The antenna can be painted to match the roof of the boat. If the internal antenna is being used, ensure that the antenna is mounted away from large metal objects.

If you are using the GPS version of the Nautilarm, it is essential that the GPS antenna is mounted the right way up and with a clear view of the sky.

3 - Wiring

The Nautilarm connector should be wired up as shown in this diagram.



The Siren and key switch are optional. The unit can be armed and disarmed remotely by text message or by using the optional remote keyfob (RF-KEY-001). The grey wire should not be cut, it should be left loose. It is the antenna for the alarm sensors.

4 - Install SIM Card

It is a good idea to first fit the SIM card into a mobile phone to ensure that it is registered and can successfully send text messages. Ensure that no PIN code is set on the SIM (the phone should not ask for a PIN after being turned on). Voice mail should also be disabled. After testing the card can be installed into the unit. If using a prepaid SIM card it is a good idea to use one whose balance can be checked and topped up without removing the SIM from the unit.

With the front panel of the Nautilarm removed, the SIM card should be installed into the holder. Ensure that the holder is fully closed after fitting the SIM.

5 - Install the Sensors

All of the sensors and the Nautilarm main unit must have their house codes set to the same thing. The house code of the Nautilarm is set using the set of DIP switched on the lower PCB in the case. The sensors are supplied with their own instructions which should be followed.

To trigger Nautilarm channel 1 the sensor should be set to channel 2. To trigger Nautilarm channel 2 the sensor should be set to channel 3.

6 - Configure unit

There are various configuration options which can be set in the Nautilarm. These can be set using SMS text messages or the optional PC Configuration Kit (TAD-201/PCC).

All of the commands sent to the Nautilarm must contain the correct password. Throughout this manual it is assumed that the default password has not been changed.

The Nautilarm will reply to all messages sent to it with the correct password. Nothing sent to the unit (including the password) is case sensitive. The default password is *SECRET*, if you have changed it use your password instead.

6.1 - Change the Password

The password is set to *SECRET* by default and should be changed. Send this message to change the password to *BICYCLE*:
Secret, password, bicycle

6.2 - Configure Automatic Status Reporting

The Nautilarm can be configured to send status messages to a certain phone number at a frequency you can define (in minutes, maximum 60000). It is important that this is enabled and configured to send messages at least once every 14 days in order to keep the SIM card registered (after long periods of inactivity SIM cards are disabled by the network). The unit will send a message to this number after power up, and then the counter begins. This is also a useful feature to receive notifications of power up.

To set the reporting frequency to 14 days (14 x 24 x 60 = 20160 minutes) and the warning number to +447754123456, send this message:
Secret, auto, 20160, +447754123456

To disable automatic status reporting (NOT RECOMMENDED), send this message:
Secret, auto, disable

6.3 - Configure the Low Voltage Warning

If the power supply to the Nautilarm drops below a preset limit for more than 2 minutes a low voltage warning is sent to a phone number you can designate.

To set the limit to 10.5V and the warning number to +447754123456, send this message:

Secret, voltage, 10.5, +447754123456

To disable the low voltage warning, send this message:

Secret, voltage, disable

6.4 - Configure the Entry, Exit and Alarm Times

After arming the unit, it must see all its inputs in a steady state for the Exit time before it will arm.

After the unit is triggered, it will wait the Entry time before sounding the alarm.

The siren will be turned on for the Alarm time when the alarm is triggered.

The unit will then wait the Exit time again before rearming itself.

To set the entry time to 20 seconds, the exit time to 30 seconds, and the Alarm time to 5 minutes send this message:

Secret, Time, 20, 30, 300

6.5 - Configure the Alarm Messages

The messages the unit sends when it is triggered can be user defined. The default messages are *Alarm zone 1 triggered* and *Alarm zone 2 triggered*.

To change the zone 1 message, send this message:

Secret, zone1, Motion detector triggered!

To change the zone 2 message, send this message:

Secret, zone2, Bilge water level sensor triggered

6.6 - Configure the Phone Numbers

The Nautilarm unit can send alarm messages to up to three phone numbers. To set or delete them, send the following:

Secret, phone, 1, +441234567890

Secret, phone, 2, delete

Secret, phone, 3, +441287657987

7 - Operation

This section describes the operation of the Nautilarm after it has been installed and configured.

7.1 - To query the status of the Nautilarm

If *Status* is sent to the unit it will reply with a message detailing its current supply voltage, along with the current status of the inputs and output and GSM signal strength. If you phone the unit from any of the registered phones then hang up (it will not answer) it will send you a status text message.

If the GPS version of the Nautilarm is being used, this command will also return the units current position. If the unit is out of GPS coverage or the GPS is turned off the unit will also return the time of the last fix. To view a map of the units location, type in the coordinates received at:

www.tad-electronics.co.uk/locate.shtml

To query the status of the unit, send this message:

Secret, status

7.2 - To Query the Credit of the SIM Card

The *Credit* command is used to set the USSD string used to request the credit remaining on a prepay SIM card. This is network specific. For O2 in the UK set it to **#10#*. For Vodafone set it to **#1345#*. If the number is omitted the unit will return the credit remaining on the SIM.

To set the USSD string for Vodafone, send this message:

*Secret, credit, *#1345#*

To check the credit remaining on the SIM, send this message:

Secret, credit

7.3 - To Arm or Disarm the system

To arm or disarm the system, send one of these messages:

Secret, arm

Secret, disarm

Alternatively the keyswitch (if fitted) can be used to arm and disarm the system. If the optional remote keyfob (RF-KEY-001) is being used, press the button once to arm the system and again to disarm it. If a siren has been fitted, it will beep slowly during the exit time and quickly during the entry time.

7.4 - To Reset the Nautilarm

To reset the system to factory settings, send the following message:

Secret, reset

7.5 - GPS Operation

The units position is requested using the Status command above. For power saving reasons, the GPS can be turned off and on. To turn the GPS off or on, send one of these messages:

Secret, gps, on

Secret, gps, off

8 - LED Operation (Non GPS Models)

There is a red / green LED on the Nautilarm. The LED flashes red or green a number of times every few seconds.

When the alarm is armed, the LED will flash red.

When the alarm is disarmed, the LED will flash green.

The number of flashes indicates the GSM signal strength (1 is little/no signal, 6 is maximum strength).

9 - LED Operation (GPS Models)

There is a red / green LED on the Nautilarm. The LED flashes red or green a number of times every few seconds.

The number of green flashes indicates the GSM signal strength (1 is little/no signal, 6 is maximum strength).

The number of red flashes indicates the number of GPS satellites in view. More than 4 is good.

10 - Support

Should you have any problems installing or configuring the Nautilarm, please contact your distributor or email support@touchline-security.co.uk for assistance.

Should you forget your unit password, it can be reset using the TAD-201/PCC. If this is not available, please contact your distributor or email support@touchline-security.co.uk to have your password reset remotely.

11 - Default Settings

Unless otherwise stated, the Nautilarm will be supplied with the following default settings:

Zone 1 message: Alarm zone 1 triggered!!

Zone 2 message: Alarm zone 2 triggered!!

No phone numbers registered.

Password set to secret.

Disarmed.

Credit number set to **#10#*.

Entry time set to 10s.

Exit time set to 10s.

Alarm time set to 5 minutes.

Low voltage warning disabled.

12 - Electrical Specifications

Operation of the Nautilarm outside of these specifications is not advised and may cause damage and unexpected operation.

Parameter	Min	Max	Typ	Unit
Supply Voltage	8	30	12/24	V
WITH GPS:				
Supply Current @ 8V	70	1000*	70	mA
Supply Current @ 12V	60	1000*	60	mA
Supply Current @ 24V	40	1000*	40	mA
WITHOUT GPS:				
Supply Current @ 8V	23	1000*	27	mA
Supply Current @ 12V	19	1000*	20	mA
Supply Current @ 24V	13	1000*	14	mA

*These peak currents will only be drawn for a few mS during the transmit uplink burst.