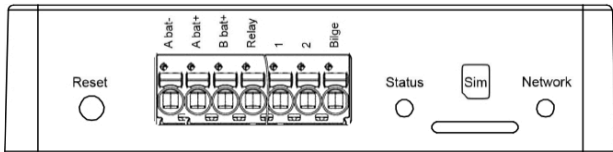


HELLO SAILOR



INSTALLATION INSTRUCTIONS

Description of Parts



Reset	Reset
A bat -	Battery 1 & 2 negative (-)
A bat +	Battery 1 positive 12/24Vdc (+) provides power to the device and monitors the A battery bank voltage
B bat +	Battery 2 positive 12/24Vdc (+) allows a second battery bank voltage to be monitored
Relay	When connected allows a relay to be controlled by text message
1	Sensor 1 sends an alert and sounds a beep every 30 seconds when it is connected to the battery negative (-) terminal via a switch.
2	Sensor 2 as sensor 1 but does not sound a buzzer.
Bilge	Bilge pump positive (+) sends an alert when it is connected to a 12/24Vdc positive (+) voltage
Status	Indicates Hello Sailor is out of sleep mode and actively processing.
Sim	Micro SIM card slot, contacts face downwards.
Network	Indicates network connection status.
Antenna	SMA socket on right of Hello Sailor.

IMPORTANT SAFETY INFORMATION

Please follow the warnings and advice in these instructions. Failure to do so could result in personal injury or damage to the vessel.

Please read all instructions before installation. For the best performance, Hello Sailor should be installed as described in this document. If you experience any difficulties during installation, please contact us at hello@hello-sailor.co.uk

Mounting Hello Sailor

Hello Sailor must be installed in a location where it will not be exposed to water, dust or extremes of temperature. Doing so may cause damage to the device and related consequences are not covered by the warranty.

It should be mounted securely to a bulkhead, using appropriate screws through the holes provided in the flanges of the case, with the connectors facing downwards and the antenna vertical. The cables running to the device should be firmly secured to the bulkhead with cable clamps, close to Hello Sailor, in order to prevent them being pulled from the terminals.

Position

You should mount Hello Sailor at least 4 inches (100mm) from other cables and potential sources of interference. For best performance, it should be mounted close to the batteries to keep the cable runs short.

Mounting close to the main distribution panel can allow you to utilize any spare switches and fuses there, and it may prevent the need for running additional long cables through the vessel.

In order to obtain the best mobile signal, it is advisable to mount Hello Sailor with a clear view of the sky. In vessels with a metal hull, mounting next to a window can dramatically increase the mobile signal. If this is not possible, an alternative, aftermarket 2G antenna with an SMA connector and 1dB gain can be used to reach a window or skylight.

Connecting Hello Sailor

Hello Sailor is provided with push terminals for wire connections. These can accept up to 2.5mm² multi-strand cable. Before connecting any wires, please ensure that they are isolated from the batteries to avoid short circuits when wiring. Only insert fuses and switch on once fully connected. Strip the insulation on each wire back, exposing 10mm of bare wire, and push firmly into the terminal until you cannot see the exposed copper.

If using particularly flexible wire, you may need to push the orange button firmly down with a small screwdriver or similar, to fully insert the wire. Once in position, pull gently on the cable to ensure that it is secure in the terminal.

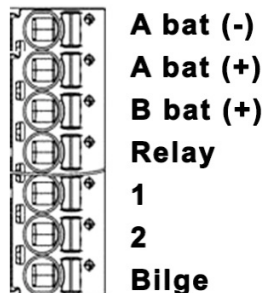
In order to remove a wire, push the button firmly in with a small screwdriver or similar, and pull the wire out gently.

Fuses

Hello Sailor must be fitted with an external 1 amp fuse on the A bat + connection. You must also install 1 amp fuses on the B bat +, relay, and Bilge connections when used.

CONNECTING TO POWER

Hello Sailor can be powered from a 12v or 24v DC battery system, and will operate between 7 and 32v. Connecting to voltages beyond this could result in personal injury or damage.



1. After mounting Hello Sailor securely, route your power cables from your distribution panel or main battery, try to keep the cable run as short as possible, and use cable of 1.5mm² or larger. CAUTION: You must use a 1A fuse in series with the A bat + terminal.

2. Connect the A bat + terminal to the positive (+) terminal of your battery through a switch and a 1 amp fuse in series as in Figure 1. If connecting to your positive (+) distribution panel, please be aware that using other high current devices on the same panel can drop the voltage that Hello Sailor receives, and so this should be taken into consideration when monitoring the A battery bank voltage.
3. Connect the A bat - terminal to the negative (-) terminal of your battery or your negative (-) bus bar.

Monitoring a Second Battery Voltage

Hello Sailor can measure the voltage of a second 12/24v DC battery, and provide this information alongside alerts or status messages. High and low voltage alarms are sent when either Battery Bank has an abnormal voltage.

CAUTION: The A battery and B battery banks must share a common negative (-) as in Figure 1. If the batteries are not joined at their negative terminals by a short, heavy-duty cable, the B bat + terminal of hello sailor cannot be used and must remain disconnected.

To monitor a second battery bank, connect B bat + to the positive (+) terminal of the second battery, through a 1 amp fuse, ensuring that the negative (-) terminals of the A and B batteries are directly connected to each other by a short heavy duty cable, as in Figure 1.

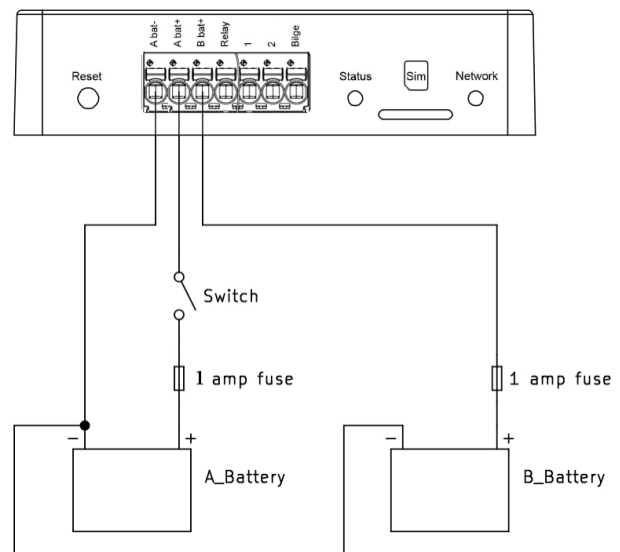


Figure 1. Power connections.

CONNECTING A BILGE PUMP

Hello Sailor can send an alert message when an automatic bilge pump turns on. To do this it needs to receive a positive (+) 12/24v DC voltage at the bilge terminal. The way to achieve this depends upon your bilge pump system, but it can usually be done without the need to run a wire all the way to the pump.

CAUTION: A 1 amp fuse must be connected in series on the wire to the bilge terminal.

Bilge pump with separate float switch or sensor

If using a pump with a separate switch, you should connect the bilge terminal of Hello Sailor to the wire between the float switch and the pump. Most systems will already have a manual over-ride wire here, running from the bilge pump switch panel and fuse, and you can use this to detect when the pump is running as in Figure 2. When the float switch turns on, a positive voltage will be seen at the pump and up to the switched side of the manual over-ride switch on the switch panel.

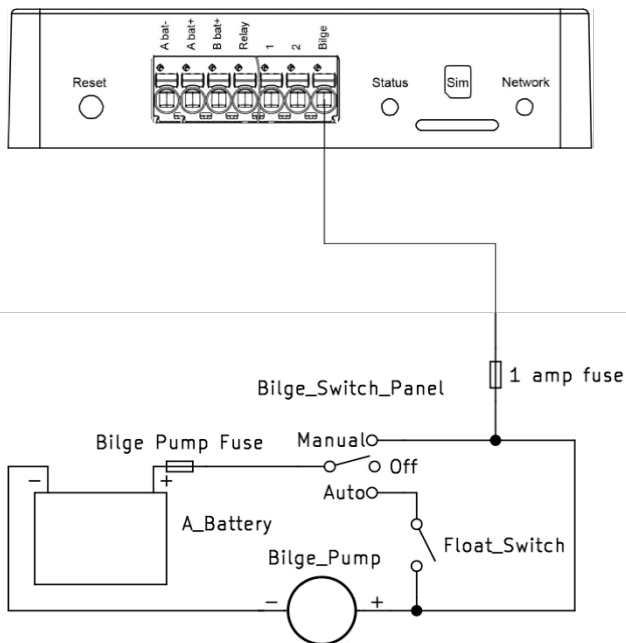


Figure 2. Bilge pump connection.

Auto bilge pump connection (without separate switch)

Most auto bilge pumps create a positive voltage on their manual over-ride wire when activated automatically. If this is the case with the pump fitted to your vessel, you can use this to tell Hello Sailor when the pump is running, by connecting the bilge

terminal to the manual wire of the bilge pump. This can be done close to the switched side of the manual over-ride switch on the bilge pump panel, to avoid running another cable all the way to the bilge, as in Figure 3.

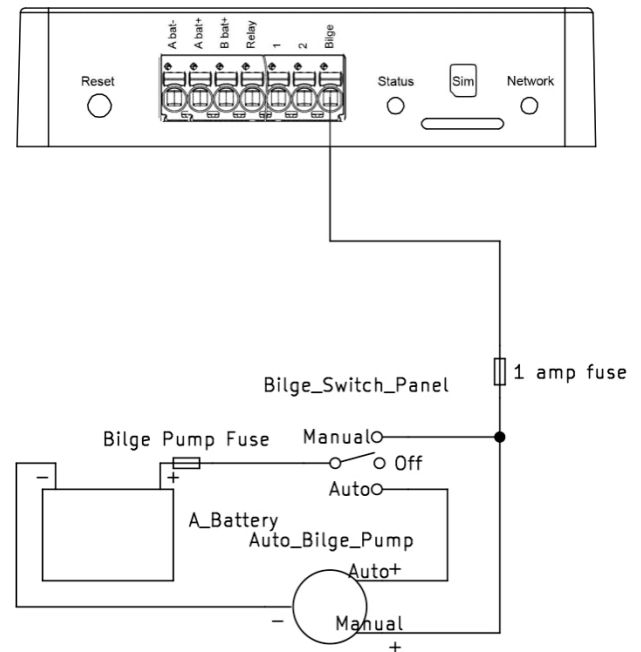


Figure 3. Auto bilge pump connection

When fully installed and wired as shown in Figures 2 or 3, it is possible to test the operation of the bilge alert function by momentarily running the pump using the manual over-ride switch on the bilge pump switch panel.

CONNECTING SENSORS

Hello Sailor will send an alert when switches connected to terminals 1 or 2 are closed. In addition, a beep will sound every 30 seconds if the switch connected to terminal 1 is closed. This can be useful as a high water alarm if you are onboard, but is not intended to replace a dedicated high water alarm, as the volume might not be heard above the noise of a vessel underway. NOTE: The beep will only sound if a phone number has been saved to memory (see owners manual).

Connecting switches to sensor terminals 1 & 2

Connect one side of a switch to sensor terminal 1 or 2, and the other side of the switch to the negative (-) DC side of your battery system as in figure 4. This can be at your negative (-) bus bar. Try to keep cable lengths short, and away from any possible sources of interference.

Suggestions for uses of the sensor terminals

Sensor terminal 1 is intended for use as a high water monitor, in the event that a vessel's bilge pump fails. But can be used for anything you can monitor with a switch. By placing a float switch or water sensor switch above the level of the bilge pump or its float switch, Hello Sailor will send a message to alert you that water has risen above the level usually pumped out.

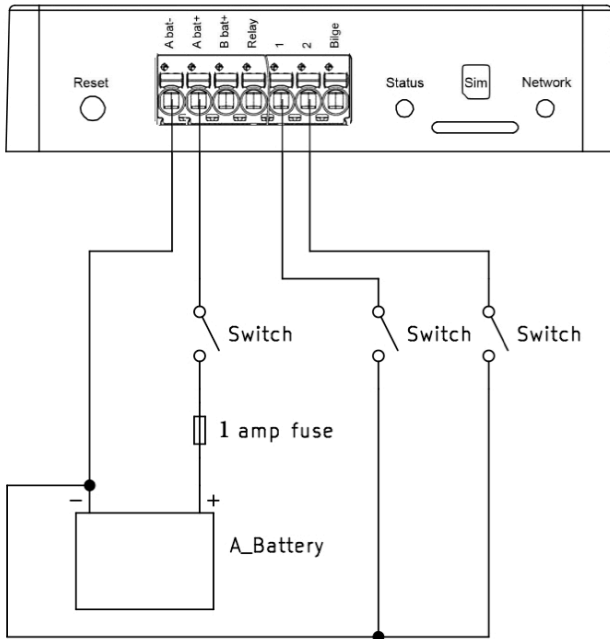


Figure 4. Sensor connections.

Sensor terminal 2 can be used in the same way, for another part of the boat, or above sensor 1. It could also be used as an intruder alert with a pressure switch or similar. A tilt switch could ensure that she's sitting level in a mud berth, or a shore power relay can be used to warn if the shore power has been disconnected.

Most types of switches will work fine with Hello Sailor, and will not use power until activated. Even once that has happened, Hello Sailor only takes a few milliamps to sense that the switch has been closed.

CONNECTING A RELAY

Hello Sailor can be used to remotely control a relay from wherever you have a mobile phone signal to send a message.

It is recommended that you use the relay terminal of hello sailor to activate an external relay, rather than connecting a load directly. If you wish to control a

small load under 0.5 amp without the use of an external relay, you must connect the Hello Sailor Relay terminal to the negative (-) side of the load.

For any load that draws more than 0.5 amp, an external relay **MUST** be used. The Hello Sailor Relay terminal must only be connected to the negative (-) side of the relay coil as in figure 5.

CAUTION: A 1 amp fuse must be connected in series on the relay terminal, as in figure 5.

It is recommended to put a switch in series on the relay connection, so that the load can be easily switched off in the event that you or Hello Sailor loose mobile phone signal, or that you loose power to your phone. It is also possible to switch off the relay manually using the reset button on Hello Sailor or by switching off power to Hello Sailor.

CAUTION: When connecting devices to the relay output, please ensure that they are safe to use remotely. All loads must be fused correctly and additional safety devices such as latching thermostats should be considered to turn off a load in the event of its failure whilst away from the vessel.

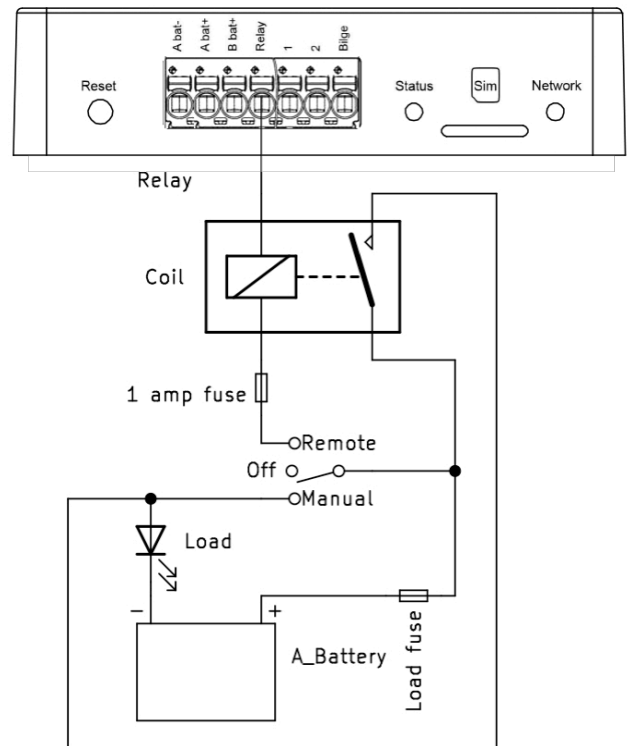


Figure 5. Relay Connections

© M Jennings & Co Ltd. Hello Sailor™ and the Hello Sailor logo are trademarks of M Jennings & Co Ltd and may not be used without the express permission of M Jennings & Co Ltd. Revision 2