

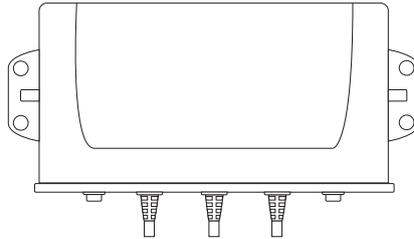
GoFree Track

Primary I/O and Accessory Guide

The GoFree Track module is intended to be mounted below deck in a position where it can be easily connected to remote sensors and to the NMEA 2000 network backbone. When the GoFree Track device is connected to diesel engines (up to 2) it should be placed within 15 meters to allow for these connections.

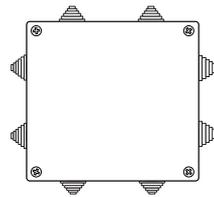
GoFree Track Module

Mount the GoFree Track module per the mounting instruction sheet supplied.



GoFree Track Junction box

→ **Note:** Junction box to be mounted close to the GoFree Track module and as advised in the mounting instruction sheet supplied.



The GoFree Track module is supplied with a waterproof junction box for making connections to the primary input/output cable which contains wires for the security sensors and the optional satellite antenna. The junction box is supplied with two 9 pin terminal strips for making wire to wire connections. Wire grommets are to be cut so the correct wire diameter cable can be fed through the grommet and still making a water tight connection.

The Junction box is also used to make the satellite antenna connection. Mount the small printed circuit board (PCB) which is supplied with the satellite antenna to the underside of the Junction box cover with the supplied adhesive. Be sure the junction box lid is free of dirt and is cleaned with an alcohol based solution prior to adhering the PCB.

Additional junction boxes can be purchased for making additional input and output connections.

Connecting the Primary I/O cable for remote security sensors

Navico provides four optional security sensors for use with GoFree Track. The high water sensor, the shore power sensor, the door closure sensor and the temperature sensor. These sensors are set up and configured on the GoFree Vessel web interface at: www.gofreemarine.com/vessel

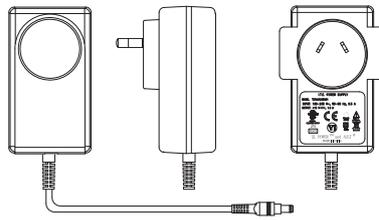
All security sensors are provided with 10 meters of cable for connection to the GoFree Track module. If more wire length is required these cables can be lengthened.

When security sensors are activated the GoFree Track module will record the change in status and will transmit an alert message to the GoFree Vessel cloud. The GoFree Vessel web system will report these alert status messages to all email addresses that are loaded in the vessel configuration settings. The GoFree Track module must be connected to either the local WIFI hotspot or via the internal GSM cellular system to report sensor activity.

The secondary I/O cable is intended for future connections to the GoFree Track module. It can be coiled up and mounted

out of the way. If you choose to cut the secondary I/O cable shorter, you must do this before power is applied to the Tracker Device, please seal it with an appropriate waterproof sealant to protect the GoFree Track module from water leaking into this exposed wire.

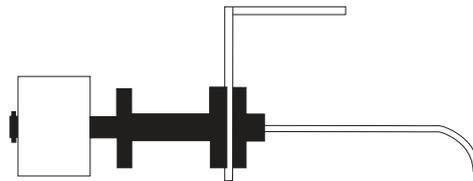
Shore power sensor



The shore power sensor will detect the presence of AC current. It is designed to report the absence of AC power at an outlet that normally has power when the boat is left unattended. The sensor converts AC power to DC power which the GoFree Track module can monitor. When AC power is absent the GoFree Track module will record and alert the condition of “no shore power” to the GoFree Vessel system.

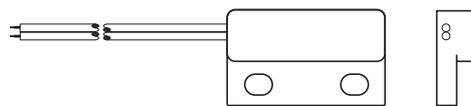
When mounting this sensor be sure to connect it to an electrical outlet that is powered primarily when the shore power circuit is on. This sensor can be used in the same way to detect when the boats generator is providing AC current.

High water sensor



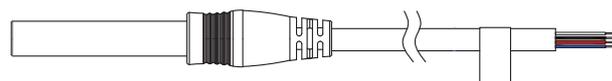
Mount the high water sensor above the level of the boats automatic bilge switch. When this sensor comes in contact with water it will create an electrical contact and the GoFree Track module will record and alert of a high water status to the GoFree Vessel system. This sensor is best used for times when no one is at the boat and able to monitor a possible sinking condition.

Door closure sensor



The door closure sensor can be mounted to a boats door or hatch. This sensor will detect when the door has been opened, and the GoFree Track module will record and alert of a door opening to the GoFree Vessel system.

Temperature sensor



The temperature sensor should be mounted in the boat in the location where you would like to be alerted for either extreme cold or extreme warm conditions. The temperature setting for either cold or warm are set in the GoFree Vessel settings web site. If you desire to be alerted for extreme cold conditions, it is best to mount this sensor low in the boat. The GoFree Track module will record the temperature level in the boat from this sensor and an alert will be sent to the email contacts which are set in the vessel configuration settings.

Engine ignition input connection:

The GoFree Track module has the capability to be connected to an engine ignition circuit. Connecting this input will enable software in the Track device to conserve ship battery power when needed, and report engine ignition and shutdown conditions to the server. Please connect these leads to an ignition on/off circuit and configure this input at: www.gofreemarine.com/vessel

NMEA 2000 connection

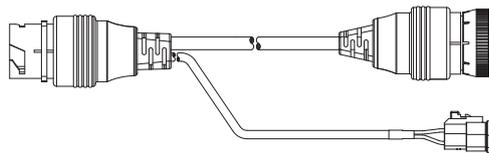
The NMEA 2000 connector is located on one of the three wires which exit the GoFree Track module.

A NMEA 2000 connection can be made at any point on an NMEA 2000 network. The GoFree Track module is supplied with a male NMEA 2000 connector. If extension cables and connection blocks are required to reach the NMEA 2000 backbone they can be purchased separately from Navico.

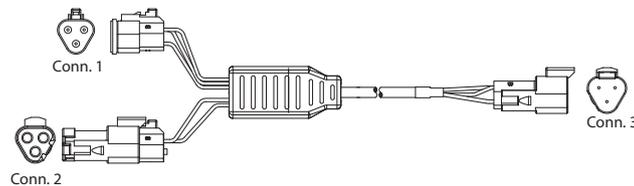
See the GoFree vessel configuration settings for the comprehensive list of supported NMEA 2000 values captured by the GoFree Track module located at: www.gofreemarine.com/vessel

Diesel engine connection

Navico provides a common SAE specified type adapter which contains a round 9 pin Deutsch connector. If an alternative connector is required contact your diesel engine manufacture or Navico product support.

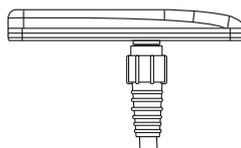


Navico provides an extension cable to extend to the engine which uses two a three pin Deutsch connector. This extension cable contains a 120 ohm resistor. This resistors is required for extending the J1939 data bus.



See the GoFree Vessel configuration settings for a comprehensive list of the engine values which are captured by the GoFree Track module: www.gofreemarine.com/vessel

GoFree Track Antennas



The Track module is supplied with a combination antenna for transmitting and receiving data. The Track-CELLFI module is supplied with a combination Cellular, GPS and WIFI antenna and the Track -WIFI module is supplied with a combination GPS and WIFI antenna. Each antenna is supplied with three meter cables and can be connected directly to the Track module via the supplied SMA type connectors.

- **10 Meter CELL / WIFI extension cable**

If the antenna is to be mounted more than three meters from the Track module, a 10 meter antenna extension cable is available from Navico. The cellular and WIFI antenna use the same cable. These cables are labeled with two color coded labels on each end. A yellow “cellular” label and a white WIFI label.

REMOVE one pair (yellow or white) of these labels before installation to make it easier for you to determine which cable is which when you connect these cables to the Track module.

- **10 Meter GPS extension cable**

The GPS extension requires a different cable.

Mounting

The antenna should be mounted in such a way that its elements will not be blocked from receiving radio signals. GPS signals are the most susceptible to being blocked by obstructions, but metal will block any of these signals. Fiberglass does not fully block these radio signals. Care must be taken to be sure there is a clear “view” to the sky in every direction.

While it is not critical that the antenna be mounted at the highest point on the boat, In general the higher the antenna is mounted the better reception will be for all the antenna elements. There are LED indicators on the Track module indicating that the cellular and WIFI signals are being received.

The Cellular+WIFI + GPS and the WIFI+GPS antennas may be mounted on a vertical surface or a horizontal surface.

Satellite Antenna kit:

- **Track Satellite Iridium Antenna kit**



The optional satellite antenna will receive and transmit signals using the Iridium satellite constellation. This antenna can be supplied with an optional 10 meter extension cable. It is connected to the Track module via the Track Junction box. Feed the 5 pin Molex connector on the Primary I/O cable through one of the Junction box grommets (must be split and sealed) and connect it to the small printed circuit board which comes with the satellite antenna. If the satellite antenna option is not being used, stow the 5 pin Molex connector inside the junction box for protection.

- **10 Meter extension cable**

Mounting

Place this antenna in a location where it has a mostly unobstructed view to the sky. This antenna can be mounted under fiberglass, but reception will be best when it has a clear view to the sky in all directions. This antenna must be mounted horizontally to a flat surface where the rubber seal can prevent water from entering through the mounting hole.

The satellite data subscription can be selected on the GoFree vessel communications settings page at:

www.gofreemarine/vessel

