

## Esa Pandora (box) layout and basic functionality

Note:

Please see ESA COACH BOX Connections Manual and configurator for detailed information's.  
(Astra Yacht web site, Download section)

Astra has development a specific Box water resistant (IP 68), that give energy (more than 15 h) to sensors and provide internal battery and fluxgate and all sensor connectors for the use of esa Coach and esa Instruments without any energy connection.



ASTRA Yacht srl:

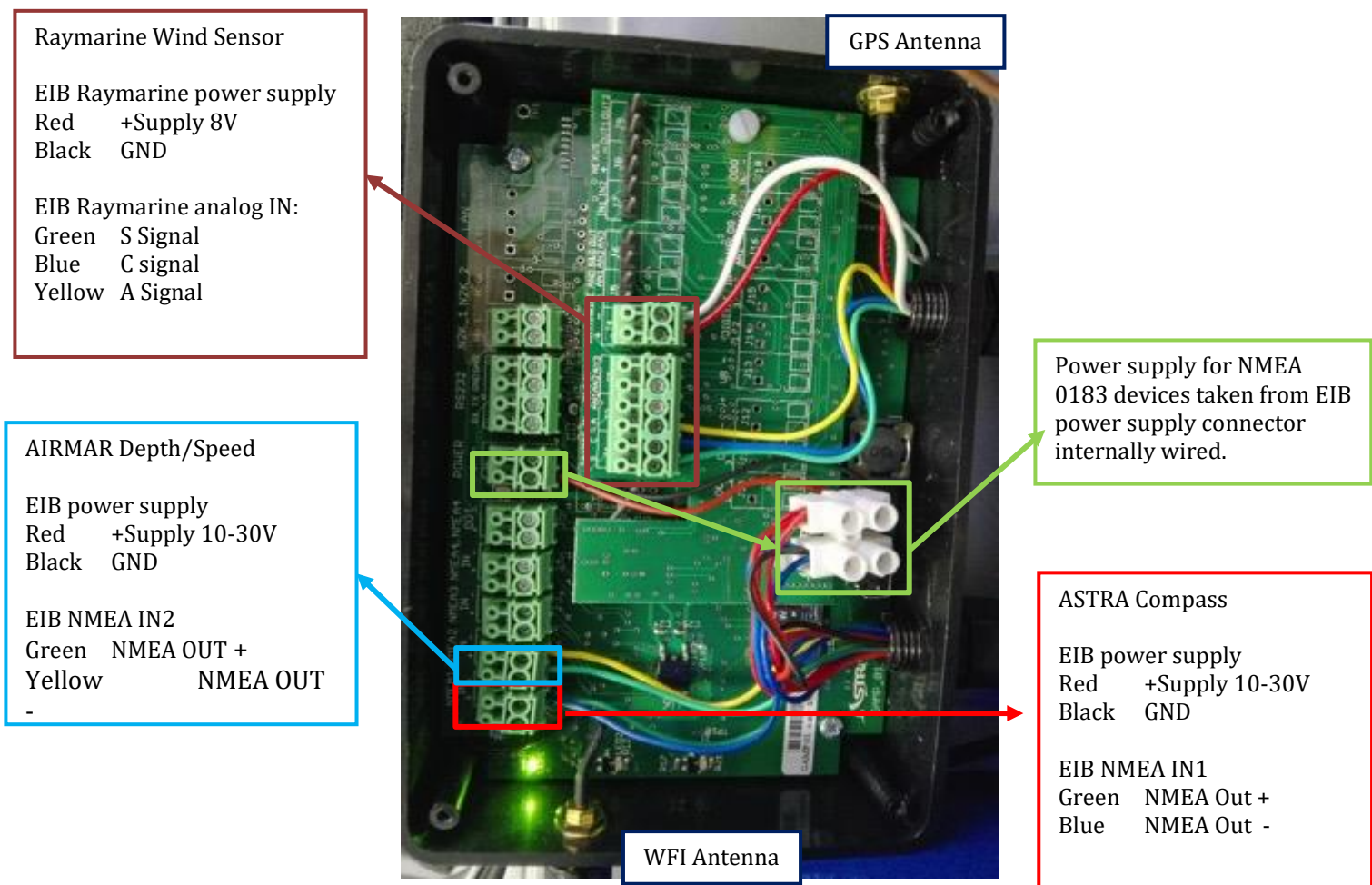
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## esa EIB/COACH box, Connected sensors:

- Raymarine wind sensor NMEA 0183 / Analog
- Airmar triducer speed/depth NMEA 0183
- ASTRA Compass NMEA 0183



**Note: Only use the included charger to recharge the internal battery;**

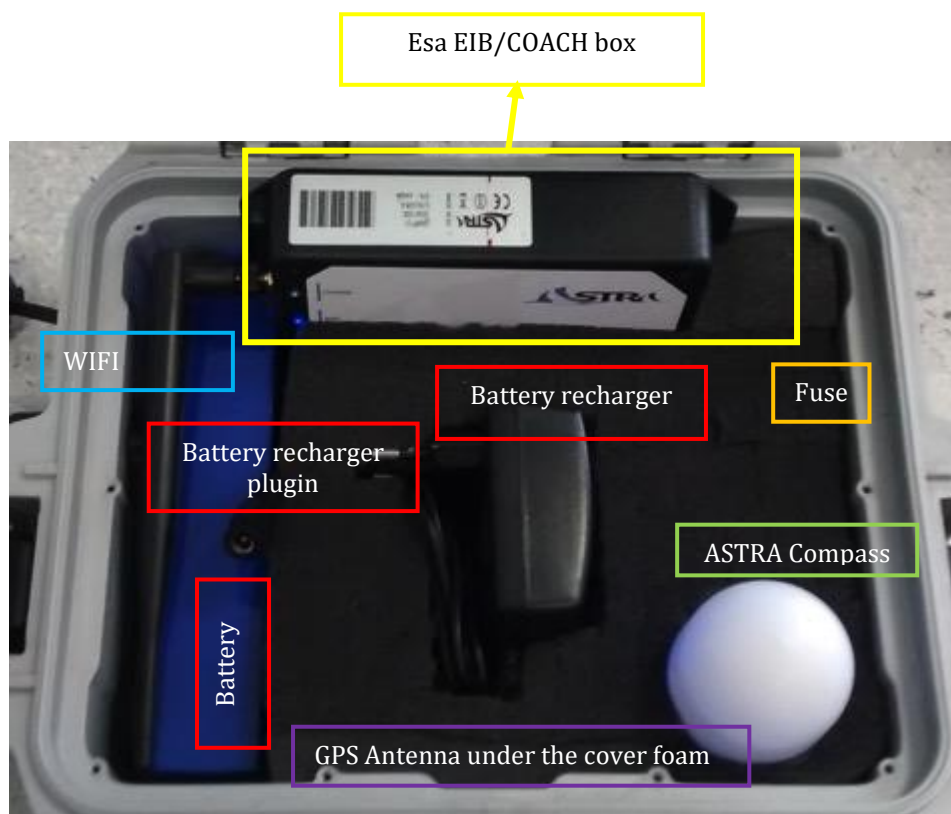
- the battery should be damage
- attention to **FIRE DANGER** (during the overcharge the temperature of the battery will increase to dangerous level)
- Open the cover during the charge

**Note: The Cigarette socket (iPad recharger) is only for charge smartphone devices (e.g. iPad) not to recharge the internal battery with a maximum output current limit of 2,5A.**

## Esa Pandora (box): components

- IP 68 BOX
- esa EIB/COACH box
- ASTRA Compass
- GPS Antenna
- Battery Lithium Ion
- Charger
- WIFI Antenna
- Wind sensor connector (Raymarine)
- NMEA 0183 connector (Airmar triducer speed/depth)
- Power switch
- Fuse
- Cigarette socket (iPhone/iPad recharger)

### Top view



Note: GPS Antenna and fuse are below the foam, not visible in the picture.

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**Note: Do not change the box layout, which is designed not to influence measurement of compass.**

## Side view left

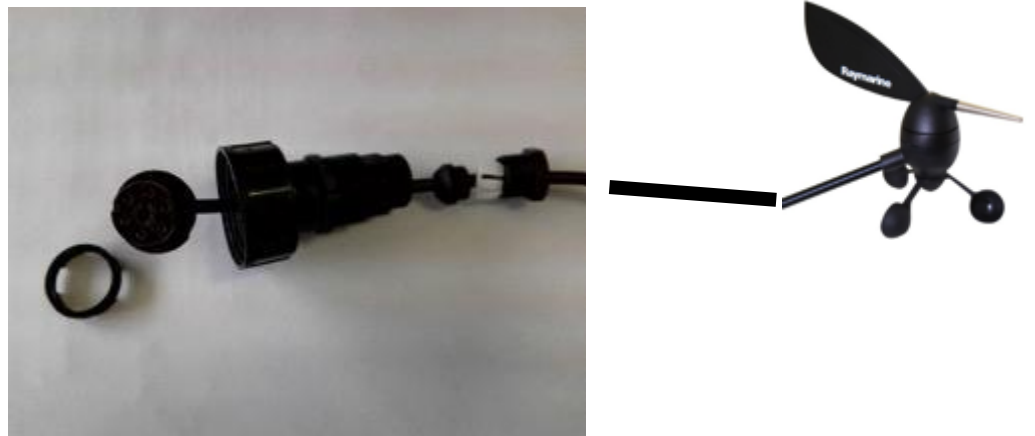


Note: Power switch light yellow when powered on. In case the box do not power on, tray to recharge the battery with the included charger. Also, check the fuse below the foam.

## Side view right



## Wind sensor connector (sensor side)



Raymarine wind sensor connector has six pins. The pins numbers are labeled inside the connector. In case you want to shorten the cable the pinout is as follows:

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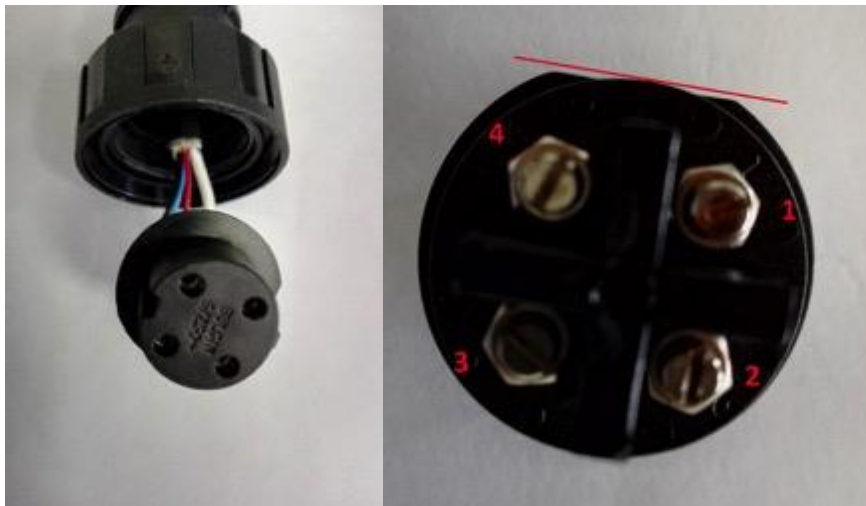
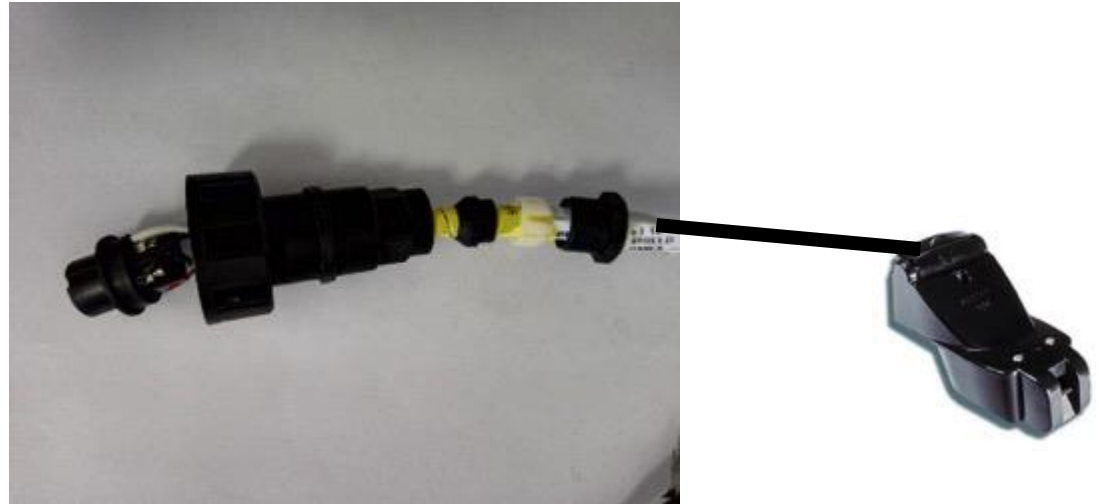
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Connector Pin	Cable color	Function
1	Red	Raymarine power supply +Supply 8V
2	Black	Raymarine power supply GND
3	Green	Raymarine analog OUT: S Signal
4	Blue	Raymarine analog OUT: C signal
5	Yellow	Raymarine DIGITAL OUT: A Signal
6	Not connected	Not connected

**NOTE: The wind sensor arm must be seated on the post positioned on top of the pole in carbon and screwed. This if poorly executed could damage the electrical connectors of the wind sensor, it is not recommended to mount the wind sensor with the pole mounted if you do not clearly see the two pieces to be assembled. Astra Yacht will not recognize damages on the pins due to incorrect mounting maneuvers**

## NMEA 0183 connector (sensor side)



NMEA 0183 connector (Airmar triducer speed/depth) connector has four pins. The pins numbers are labeled inside the connector. In case you want to shorten the cable the pin out is as follows:

Connector Pin	Cable color	Function
1	Red	Power supply 10-30V
2	Black	Power supply GND
3	White	NMEA OUT +
4	Blue	NMEA OUT -

## Battery charge diagram

