boat vitals

Tomorrow's best of breed solutions delivered today

BOAT MONITORING

DATA INPUT, TRANSPORT, BLEND, CONTROLLING AND INFORMATION

BOAT-VITALS ADVANCED – USER GUIDE

GENERAL INFO

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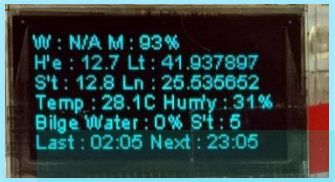
Installation of Advance Endpoint is straight forward.

The module can be installed naked without cover behind a wall or with the cover on per customer decision. If installed naked then care should be taken to allow space on around it for heat dissemination.

The humidity/temperature sensor is advisable to be located on appropriate place where this measurement are desired to be taken.

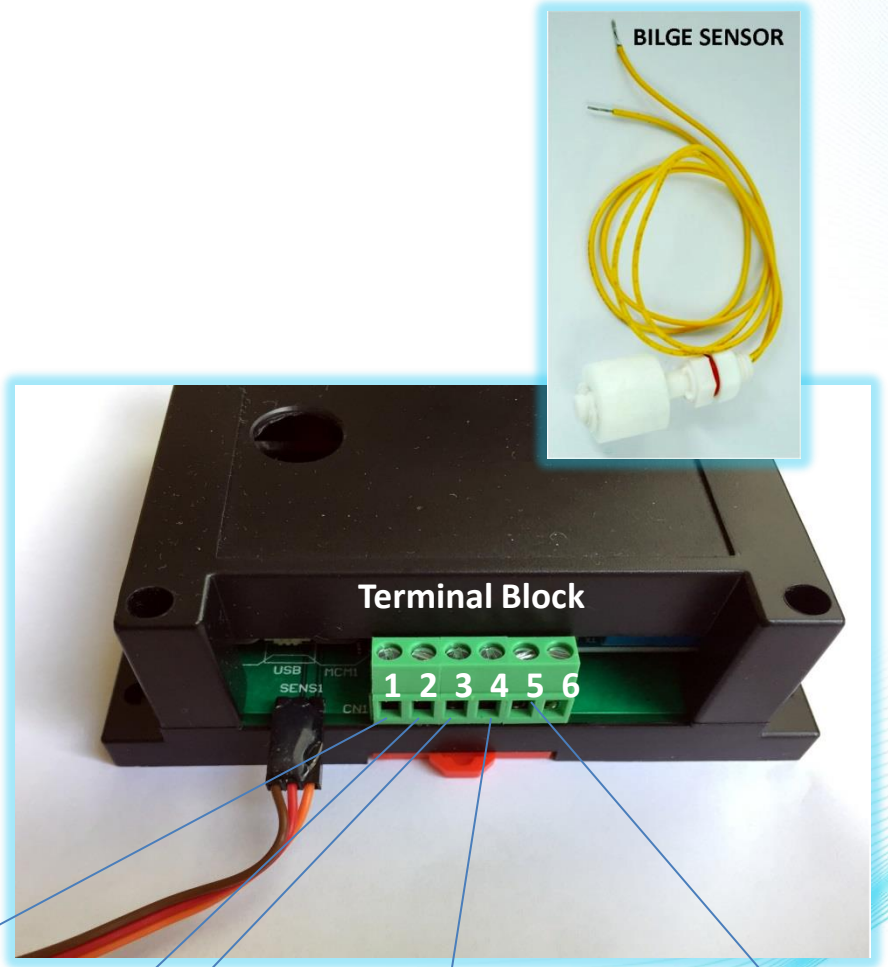
To achieve best connection install the device vertically with cable connectors pointing down – this way the GPS antenna pointing to the sky



In case your device is equipped with OLED screen it displays 6 lines text:

1. W(WiFi Signal strength), M (GSM/GPR/Mobile Signal strength), R (LoRa/IoR/Radio Signal Strength)
2. H'e (House/Service battery bank volts), Lt (GPS Latitude)
3. S't (Start Battery volts), Ln (GPS Longitude)
4. Temp (Temperature), Hum'y (Humidity)
5. Bilge Water, S't (GPS Satellites Count)
6. Last (Before how many minutes:seconds data has been sent to the server), Next (After how many minutes:seconds data will be send again to the server)

CONNECTING



Using a screw driver connect all required cables (*as per the figure on this page*):

1. Ground (-/GND) of Start and House Battery Banks to **Terminal 1**

2. VCC/+ of House Battery to **Terminal 4**

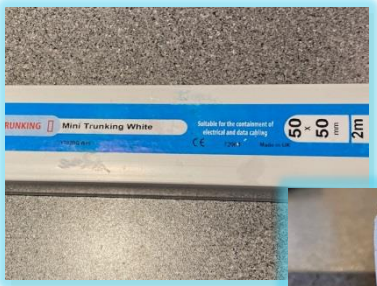
3. VCC/+ of Start Battery to **Terminal 5**

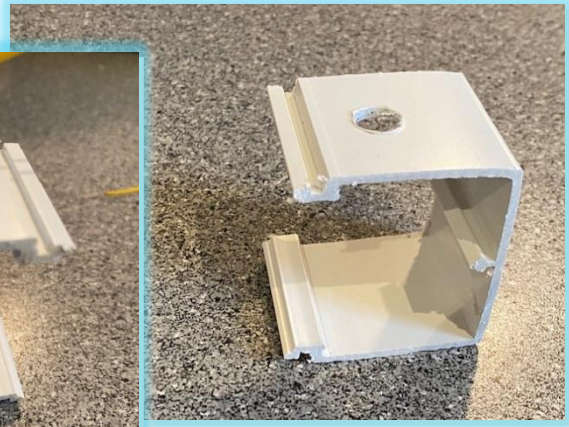
(*optional*)
4. Connect the two cables for bilge water sensor to **Terminal 2** and **Terminal 3** (no polarity) – if you need more then one bilge sensor (for CATs for example) you need to connect them in **series**.

*IMPORTANT : in case NO bilge sensor is installed **Terminal 2** and **Terminal 3** need to be connected (shorted) with wire.

*** Terminal 6** is optional digital output – when device is in ON/Live - 3.3v (high), when device is in sleep mode 0v (low)

BILGE SENSOR





** As most of the questions that we receive are related to easiest way to install the bilge sensor – we have added this page with example installation steps.*

Every boat has a different bilge compartments and because of that we do not supply a standard bilge sensor holder, but never the less there is always similarities in the installs and here we will give a step by step guide for simple bilge sensor installation:

- Source a plastic cannel profile (e.g. mini cable trunking 50mmx50mmx2mm)
- Cut a peace of about 50mm wide.
- Drill a hole on one side(10mm)
- Screw the sensor in the hole
- Screw or glue with sikaflex the bottom part of the holder to the hull with cables pointing up
- Extend the sensor cables to the device and connect to Terminal 2 and Terminal 3

COMMUNICATION

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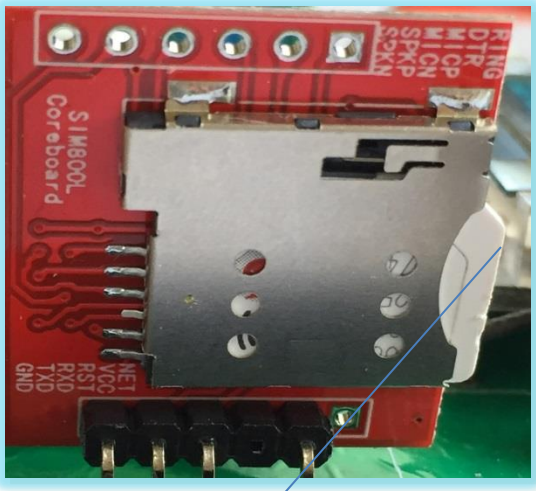
IF YOU INSTALL YOUR OWN SIM CARD



PLEASE TAKE NOTE FROM THE PICTURE HOW THE SIM CARD SHOULD BE ORIENTED

The device can send its data to the server using:

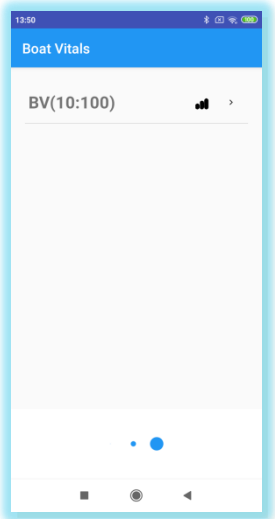
1. Uding RF/Radio/IoT channel in case the marina where the boat is located has joined Boat-Vitals network (* if equipped with this future)

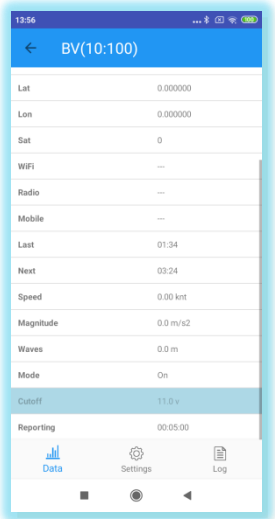
2. Using WiFi from the marina/café/MiFi or shared from a mobile device – configuration need to be done as described in the next page.

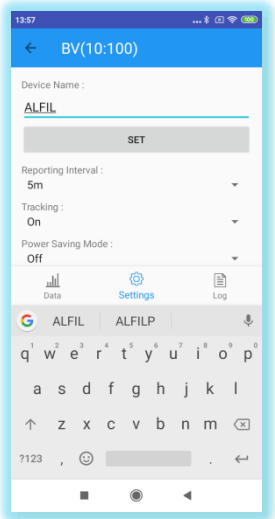
3. Using SIM/GSM/GPRS – For some world region the device is supplied with already fitted SIM card for other regions the customer can add his own SIM card with mobile internet to the device. – configuration need to be done as described in the next page.

*IMPORTANT: The internet traffic generated by the device *(assuming its default reporting interval setting is used : once every 1/2h)* is less then 3Kbytes per 24h: which equals to 1 MB per year. But depending on how the mobile operator calculate the traffic it can be calculated as significantly more. The system does 48 sessions per 24h.

MOBILE CONFIGURATOR







You can find the Google Play and iOS app store links for the Bluetooth(BLE) configurator from :

http://www.boat-vitals.com/setup.html

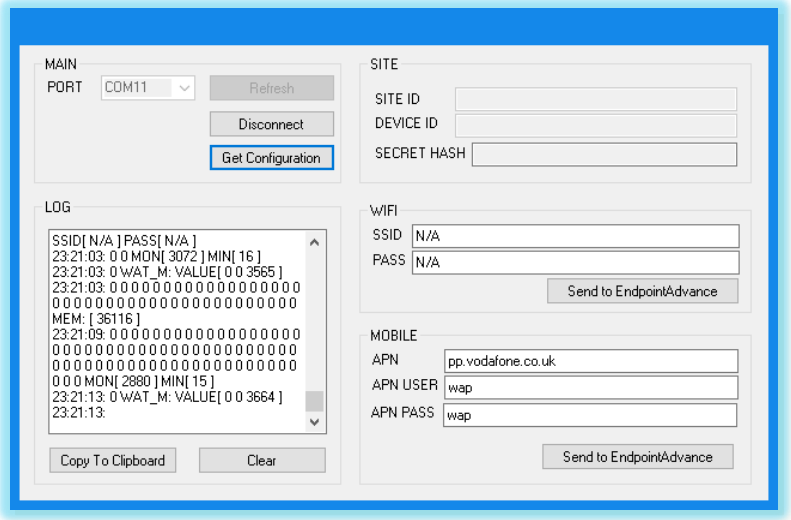
Using the app you can :

- View real-time data from device
- Find your location on the map
- Control the power safe mode ON /OFF *(the device go in deep sleep between data send interval and consumption is down to 10 µAh - (in other words practically zero).*
- Changing the reporting interval (from 5min to do 24h)

(when the boat is racing or on anchor or when on the hard and you do not need data with high frequency - the default setting of 1/2h will be restored after24h automatically if your device is using mobile network traffic)

- Stop/Start tracking - when you don't want to be tracked where you go
- Cutoff - preferred voltage level at which the device stop using power and go in deep sleep.
- Configure Mobile operator setting - in case you opt for own SIM card.
- Configure WiFI in case you have wifi where the boat is and want to save from mobile traffic.
- Download and install software updates/upgrades.
- Configurable Device/Boat name
- Send diagnostic information to support

WINDOWS CONFIGURATOR



Download and install USB driver for your device from:

https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers

Download and install the Advanced Endpoint configurator from : **http://www.boat-vitals.com/setup.html**

1. Connect the device using USB to micro USB cable.
2. Start Advanced Endpoint configurator
3. Click “Refresh”
4. Click “Connect”
5. Click “Get Configuration”
6. IF all is OK the SSID, PASS, APN, APN USER, APN PASS should be filled with values. - if not check the connection.
7. If WiFi configuration is required set SSID and PASS and click “Send to EndpointAdvance”.
8. If Mobile Internet configuration is required set APN, APN USER and APM PASS and click Send to “EndpointAdvance”.