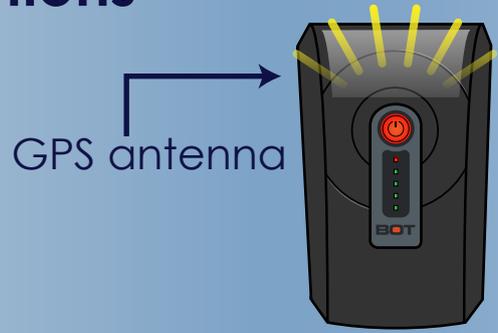


Mounting & Configuration Options

First, mount YachtBot securely, making sure the GPS antenna has a clear view of the sky.

Second, make sure the setting for IMU Orientation in the **config.ini** file matches the physical setup.



Your options in the config.ini file are: **IMU ORIENTATION <options>**

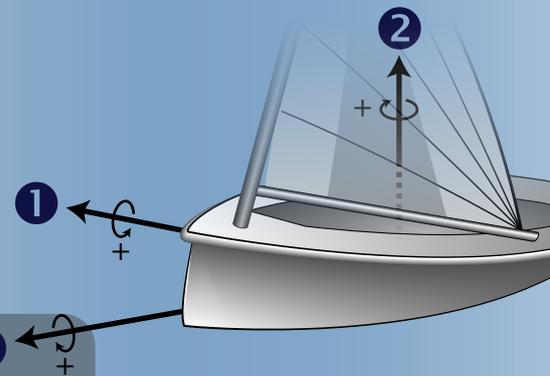


YachtBot's serial sticker touches the indicated *surface*. The GPS antenna always points up, apart from **DECK**, where it points towards the bow.

Intepreting Data

Relating Pitch-Yaw-Roll Values to Boat Motion

- 1 Pitch positive — Bow dips down
- 2 Yaw positive — Bow turns starboard
- 3 Roll positive — Port rolls down

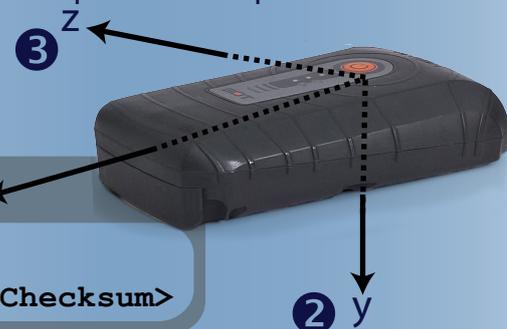


example data from the IMU LOG file: (units of degrees)

```
$PIIMU,<timestamp>, 0x1, 1 2 3
0.7,88.4,-178.6, <Checksum>
```

Relating XYZ Acceleration to YachtBot Motion

- 1 X positive — YachtBot moves towards waterproof cap
- 2 Y positive — YachtBot moves down
- 3 Z positive — YachtBot moves sideways



example data from the IMU LOG file: (units of g)

```
$PIIMU,<timestamp>, 0x29, 1 2 3
0.00816,-0.00781,0.00736, <Checksum>
```