Bizclap Gyrocompass

BizGyro User Manual - **03/2025 update**

BizGyro®

Quick User Guide

BizGyro

BizGyro - GNSS

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Bizclap S.r.l

Mar 25, 2025

Factory Default Settings

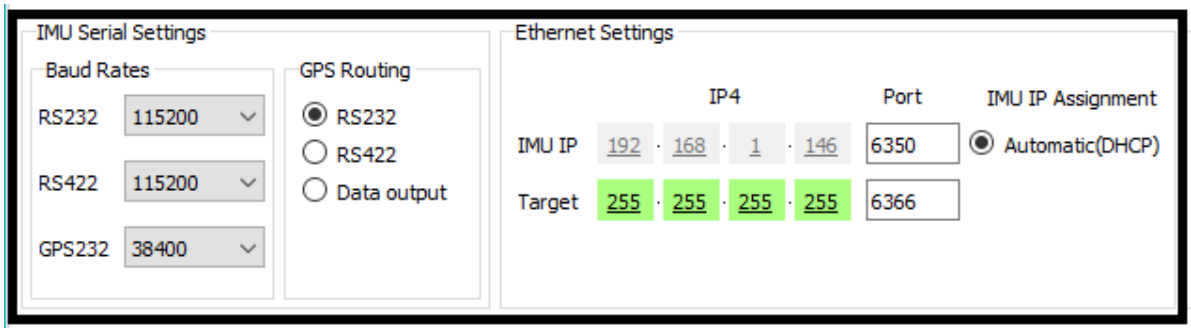
➢ output protocol

The Motion Sensor output string is factory preset to the following parameters:

The output order is:
Roll, Pitch, Yaw, Roll Rate, Pitch Rate, Yaw Rate, Heave, Heave velocity, Ax, Ay, Az, Check sum and Watchdog Counter.

➢ Interface Default settings

the **3** available **serial port** and the **Ethernet** output settings are factory configured to the following values:



the DB9 connectors on the junction box are labeled in the following order:

- ➢ **1 for RS232**
- ➢ **2 for RS422**
- ➢ **3 for GPS232**

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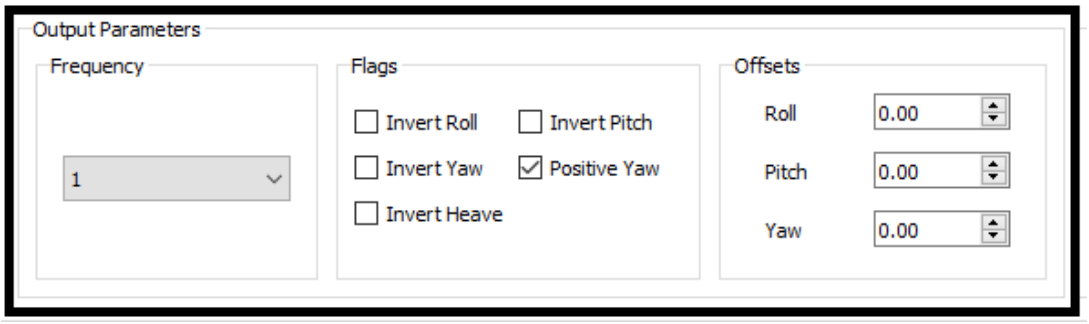
➢ Output Frequency and other settings

The default output frequency is factory preset to 1 Hz.



➢ Electrical Interface

the Motion Sensor is an easy going device, an included junction box deliver power to the sensor from a standard 220V AC power socket, an included switching converter deliver 12 V DC Power to the sensor.
The junction box provide **3** standard **DB9** connector for serial output communication, and an **RJ45 Female** socket for Ethernet communication.
In any case if the customer would like to bypass the junction box for any reason, the signal routing from the motion sensor data cable are as described in the following tables.

RS232

color code (IMU Cable)	Signal RS232 cable (junction Box)	DB9 PIN Nr
Brown	ORANGE RS-232 Rx1	PIN3
WHITE Brown	RED RS-232 Tx1	PIN2
WHITE-BLACK	Green DGND	PIN5

GPS RS232

color code (IMU Cable)	Signal RS232 cable (junction Box)	DB9 PIN Nr
Yellow	ORANGE RS-232 Rx2	PIN3
WHITE-RED	RED RS-232 Tx2	PIN2
WHITE-BLACK	GREEN DGND	PIN5

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RS422

color code (IMU Cable)	Signal RS422 cable (junction Box)	DB9 PIN Nr
BLUE	ORANGE RS-422 Rx+	PIN3
VIOLET	YELLOW RS-422 Rx-	PIN4
GREY	BROWN RS-422 Tx-	PIN1
WHITE	RED RS-422 Tx+	PIN2

Ethernet

Color (IMU Cable)	Signal
white-green	Eth Tx+
green	Eth Tx-
white-orange	Eth Rx+
orange	Eth Rx-

IMU Power Input

color code (IMU Cable)	IMU Power input (junction Box)
RED	DC Input (6.5 to 36 V) 12V recommended
BLACK	GND

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➢ Troubleshooting

If bad or corrupted data is displayed, or if no output data at all is seen please refer to the FAQs below which cover the most common configuration issues.

- Are you running the latest control panel and/or firmware?
  If not, please update your control panel and/or firmware.
- Have you set the correct sample rates (Baud Rate) with your computer/PLC … and the Motion Sensor?
  If you are not sure about the Baud rate, please refer to the Auto detect option in the control panel software, please note that The default baud rate set when the unit is shipped is **115200**.
- Which serial port is active, **RS422** or **RS232**?
  When the motion sensor is powered on and running, it sends out data and receives commands over all the serial ports channels.
- Is the sensor powered up and fully operational?
  Voltage should be no less than **6.5** and no more than **36 VDC**, the recommended power voltage is **12** VDC, the sensor draws approximately no more than **250mA** of current from a **12V** supply when fully active and running.

For more detailed information, please refer to the full USER Manual, or Contact Bizclap S.r.l at the following addresses.

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