



Lumenier RID Setup for INAV

GPS Settings:

Firmware Version: 7.1.0 (or newer)

Ports Tab: Sensor Input = GPS

Baud Rate = 57600

Example:

Identifier	Data	Telemetry	RX	Sensors	Peripherals
USB VCP	<input checked="" type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200
UART1	<input checked="" type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200
UART2	<input type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	GPS 57600	Disabled 115200
UART3	<input type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200
UART4	<input type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200
UART5	<input type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200
UART6	<input type="checkbox"/> MSP 115200	Disabled AUTO	<input type="checkbox"/> Serial RX	Disabled 115200	Disabled 115200

Configuration Tab: GPS for navigation and telemetry = Enabled

Example:

Other Features	
<input type="checkbox"/>	Enable CPU based serial ports
<input checked="" type="checkbox"/>	GPS for navigation and telemetry
<input checked="" type="checkbox"/>	Telemetry output
<input type="checkbox"/>	Reversible motors mode (for use with reversible ESCs)
<input type="checkbox"/>	Analog RSSI input
<input type="checkbox"/>	Multi-color RGB LED strip support
<input type="checkbox"/>	OLED Screen Display
<input checked="" type="checkbox"/>	Blackbox flight data recorder
<input type="checkbox"/>	Enable motor and servo output
<input type="checkbox"/>	CPU based SPI
<input checked="" type="checkbox"/>	OSD
<input checked="" type="checkbox"/>	Permanently enable AIRMODE
<input type="checkbox"/>	Permanently enable Launch Mode for Fixed Wing
<input checked="" type="checkbox"/>	Profile selection with TX stick command
<input type="checkbox"/>	Throttle voltage compensation
<input type="checkbox"/>	Automatic battery profile selection
<input type="checkbox"/>	Continuously trim servos on Fixed Wing



GPS Tab: GPS for navigation and telemetry = Enabled
 Protocol = UBLOX

 Gps use Galileo Satellites (EU) = Enabled
 Gps use BeiDou Satellites (CN) = Enabled
 Gps use Glonass Satellites (RU) = Enabled

Example:

GPS

Configuration

Note: Remember to configure a Serial Port (via Ports tab) when using GPS feature.

<input checked="" type="checkbox"/>	GPS for navigation and telemetry	?
UBLOX	Protocol	
Disabled	Ground Assistance Type	
<input checked="" type="checkbox"/>	Gps use Galileo Satellites (EU)	
<input checked="" type="checkbox"/>	Gps use BeiDou Satellites (CN)	
<input checked="" type="checkbox"/>	Gps use Glonass Satellites (RU)	
00:00	hh:mm Timezone Offset	?
OFF	Automatic Daylight Savings Time	?

Note: It is best practice to power cycle the board after configuring all GPS related settings.



Magnetometer Settings:

Firmware Version: 7.1.0 (or newer)

Configuration Tab:

INAV should automatically detect the magnetometer upon bootup as “LIS3MDL”

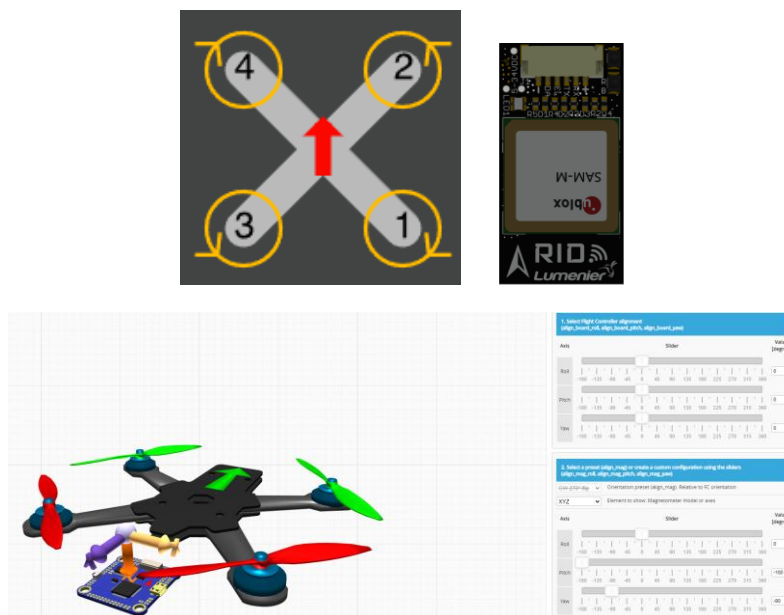
Example:



Alignment tool Tab:

If RID module is mounted with the indication arrow pointing towards the front of the vehicle, MAG Alignment: Roll = 0° Pitch = -180° Yaw = -90°

Example:





Note: If you are using a mount that adds a tilt to the module like the **Lumenier RID - Remote ID + Antenna Rear Mount** add the angle of mount. In this case, for the **Lumenier RID - Remote ID + Antenna Rear Mount**, add in Roll = -25°

Example:



The screenshot displays a drone configuration interface with two sections for orientation settings. The first section, titled '1. Select Flight Controller alignment', shows sliders for Roll, Pitch, and Yaw, all set to 0 degrees. The second section, titled '2. Select a preset (align_mag) or create a custom configuration using the sliders', shows a dropdown menu set to 'MagSensor model or axes'. Below this, the sliders for Roll, Pitch, and Yaw are set to -25, -180, and -90 degrees respectively.

Axis	Slider	Value [degree]
Roll	0	0
Pitch	0	0
Yaw	0	0

Axis	Slider	Value [degree]
Roll	-25	-25
Pitch	-180	-180
Yaw	-90	-90