

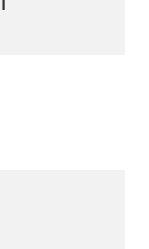


HGLRC M100-5883 GPS

Manual



M100-5883 GPS instruction manual



Parameters

Receiver Type: ☐GPS/QZSS L1C/A ☒SBAS EGNOS、GAGAN、MSAS和WAAS

☒GLONASS L1OF ☒BDS B1I ☒Galileo E1B/C

Sensitivity: Tracking and Navigation -166DBM, re-obtain -160dbm, cold start-148dbm

The first fix¹ time: Cold start 29s, hot start 1S

Horizontal position accuracy²: .02 m CEP

Accuracy of Time Mai Signal: RMS 30ns, 99% 60ns

Speed precision m: 0 m/s.05

Operating limits: Interaction ≤ 4 g, altitude 80,000 m, speed 500 m/s

Frequency of time pulse signal: 1Hz

Potter rate: 9,600 -460800 BPS (default is 115200 bps)

Maximum navigation update rate: 10Hz (default 10 Hz, configuration)

*The default GPS+Galileo+QZSS+SBAS, BDS and Honor are not supported at the same time

1. All satellites are ≥ -130dBm
2. CEP 50%, 24 hours static, ≥ -130dBm, > 6SVs
3. 50%, 30 m/s, dynamic operation
4. Assuming onboard < 4g platform

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Introduction

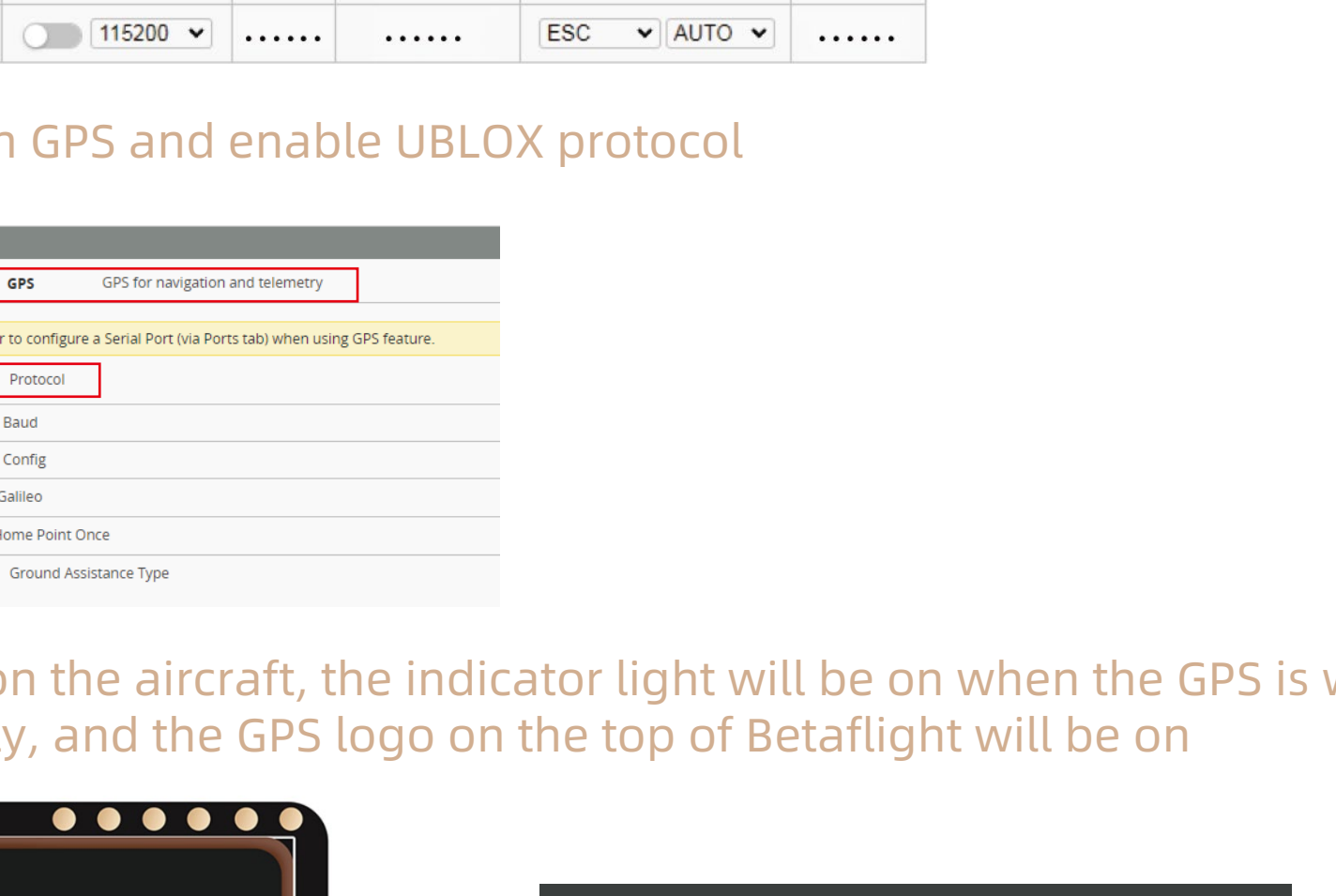


Indicator light	PPS (red light))	Power (blue light)
Normal start	normal bright	normal bright
Real position accuracy	Flickering	normal bright

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Wiring diagram



Connect the GPS to any port of the flight controller according to the wiring diagram, and use UART3 as a demonstration

(Note: Be sure to connect to a free serial port or a dedicated GPS serial port)

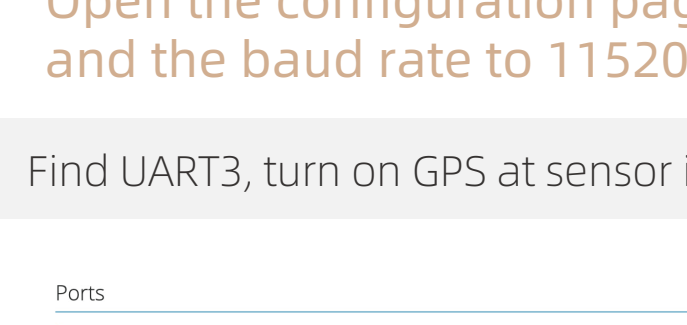
Betaflight settings

Open the port page of Betaflight, set the sensor input type to GPS, and the baud rate to 115200

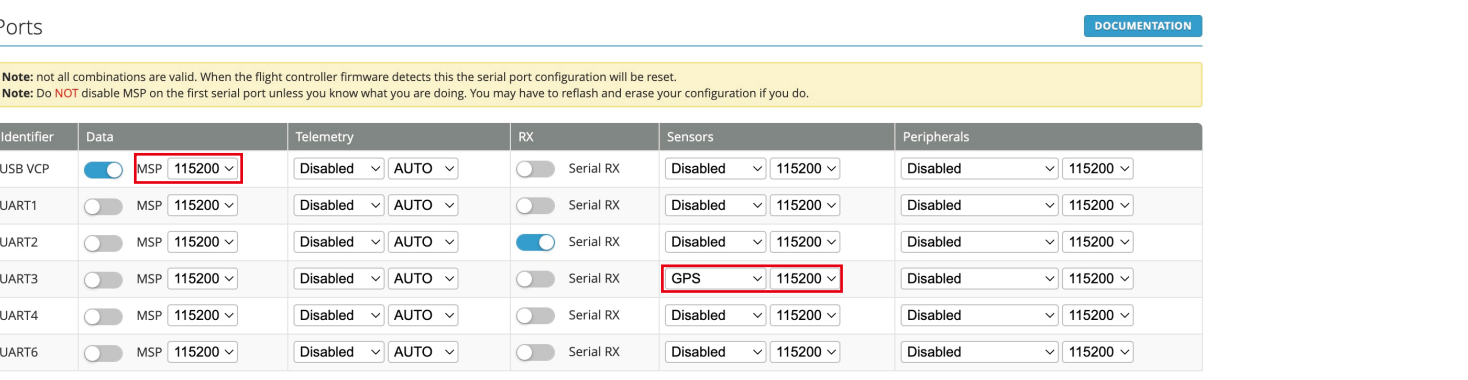
Find UART3, turn on GPS at sensor input and select baud rate 115200

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART1	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART2	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART3	<input checked="" type="checkbox"/> 115200	.....	.....	GPS	115200
UART4	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART6	<input type="checkbox"/> 115200	.....	.....	ESC	AUTO

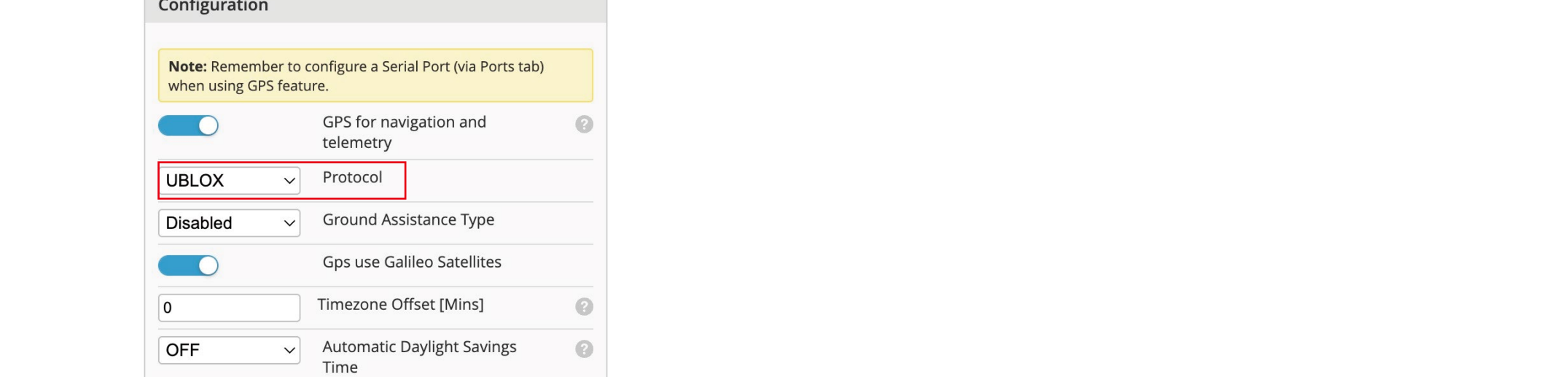
Turn on GPS and enable UBLOX protocol



Power on the aircraft, the indicator light will be on when the GPS is working normally, and the GPS logo on the top of Betaflight will be on



Compass direction



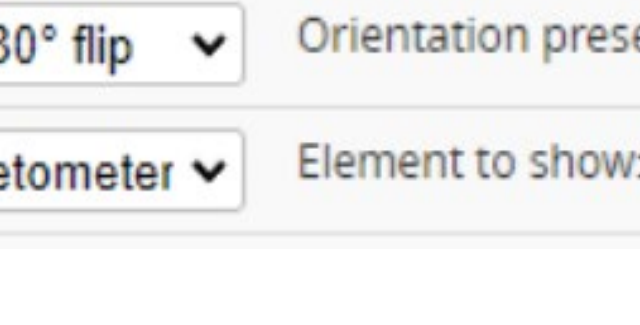
INAV settings

Open the configuration page of INAV, set the sensor input type to GPS, and the baud rate to 115200

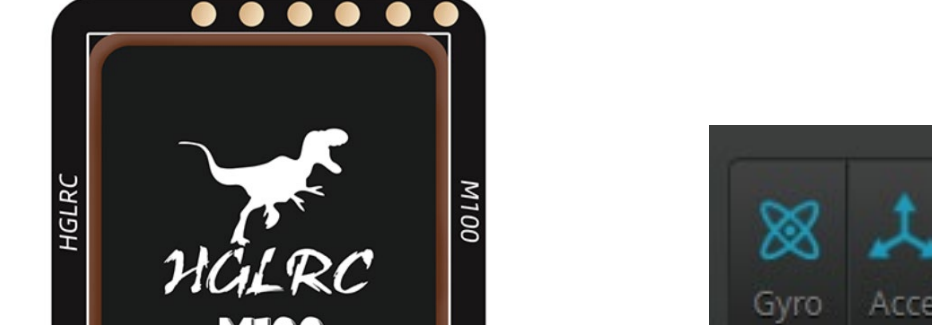
Find UART3, turn on GPS at sensor input and select baud rate 115200

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART1	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART2	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART3	<input checked="" type="checkbox"/> 115200	.....	.....	GPS	115200
UART4	<input type="checkbox"/> 115200	.....	.....	Disabled	AUTO
UART6	<input type="checkbox"/> 115200	.....	.....	ESC	AUTO

Turn on GPS and enable UBLOX protocol



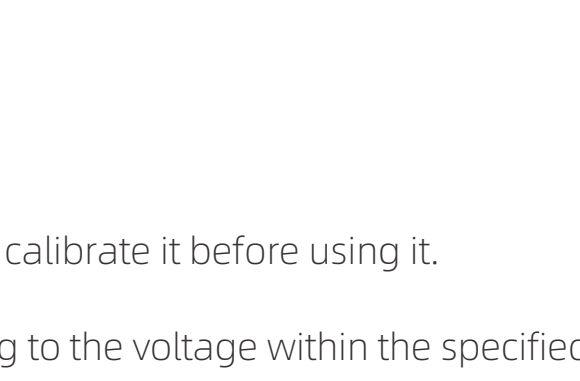
Compass Selection QMC 5883



Power on the aircraft, the indicator light is on when the GPS is working normally, and the GPS and compass lights on the top of the inav are on



Compass direction



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Precautions

1. After turning on the compass, please calibrate it before using it.
2. Please supply power to GPS according to the voltage within the specified range.
3. Please carefully solder according to the wiring diagram to avoid short-circuiting and burning the GPS.
4. Please use BF4.3.0 or above firmware (too low version does not recognize the 10th generation chip).
5. GPS must be installed with the antenna facing up and away from motors, power lines and other interfering parts

Contact us



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