



# HGLRC M100-PRO GPS

## manual



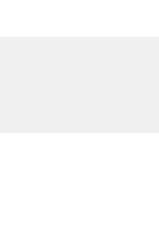
### HGLRC M100-PRO GPS instruction manual



## Precautions

1. To obtain a better signal, it is recommended that the GPS antenna should face the sky. And avoid objects that block the signal.
2. When installing, it is recommended to stay away from other RF modules or antennas to reduce signal interference and attenuation.
3. When using cables, different manufacturers have different flight control wiring definitions, so pay attention to the connection order.
4. Due to different site environments and different signal interference, the search speed and number of satellites will vary.
5. Please read the instructions before use

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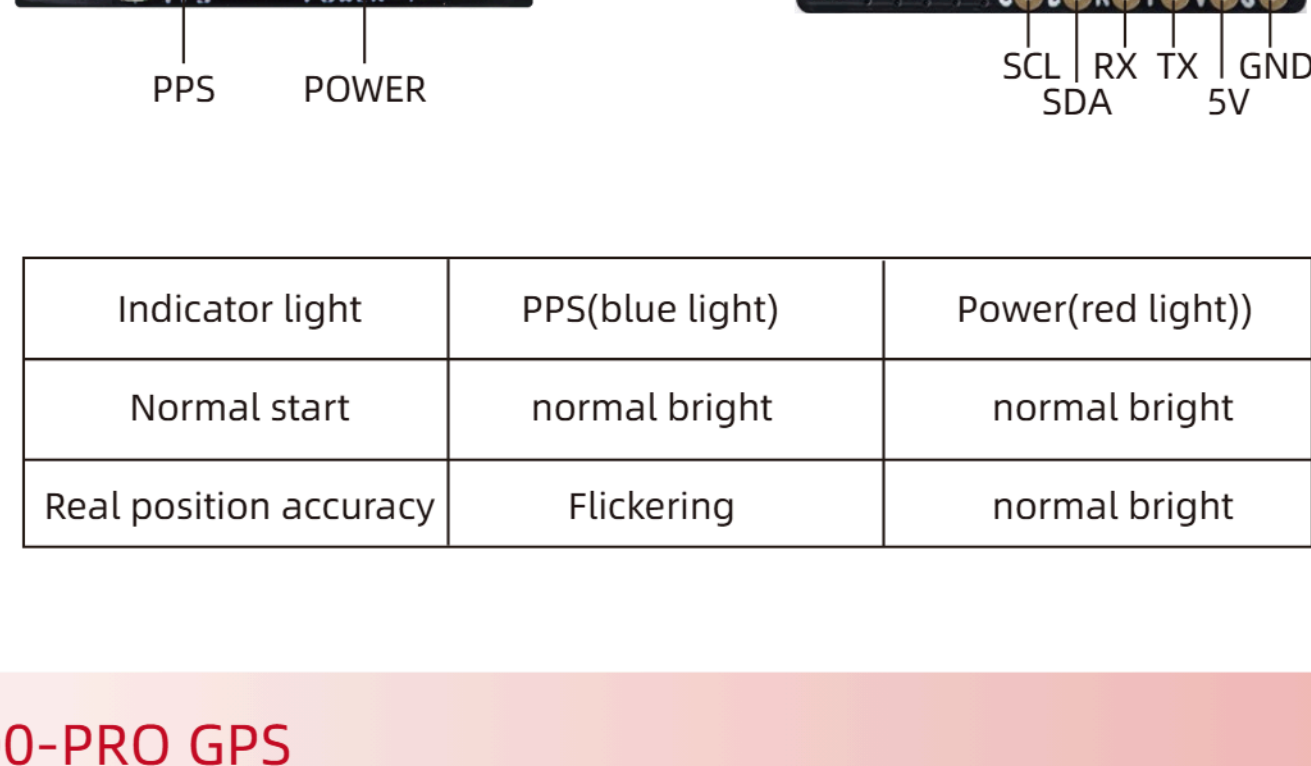
## Parameters

Output protocol: NMEA, UBX
Operating voltage: DC 3.6V-5.5V, typical: 5.0V
Baud rate: 9,600 -- 2000000 bps (default is 115200 bps)
Data output update rate: 1-20Hz (default is 10 Hz)
Sensitivity: Tracking -163dBm, Reacquisition -159dBm, Cold start -148dBm, Hot start -159dBm
Time for the first Fix <sup>1</sup> : Cold start 28s, Hot start 1s
Horizontal position accuracy: 1.5mCEP
Speed accuracy: 0.1m/sCEP
Working limits: Gravity acceleration ≤ 4 g, altitude 50000 m, speed 500 m/s
Dimensions: 21.2*21.2*8.2mm
Weight: 7.9g
Connector: 1.00 pitch 6pin Seat
Working mode: GPS, GLONASS, BDS, GALILEO, IRNSS
Auxiliary system: SBAS, QZSS

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## Introduction

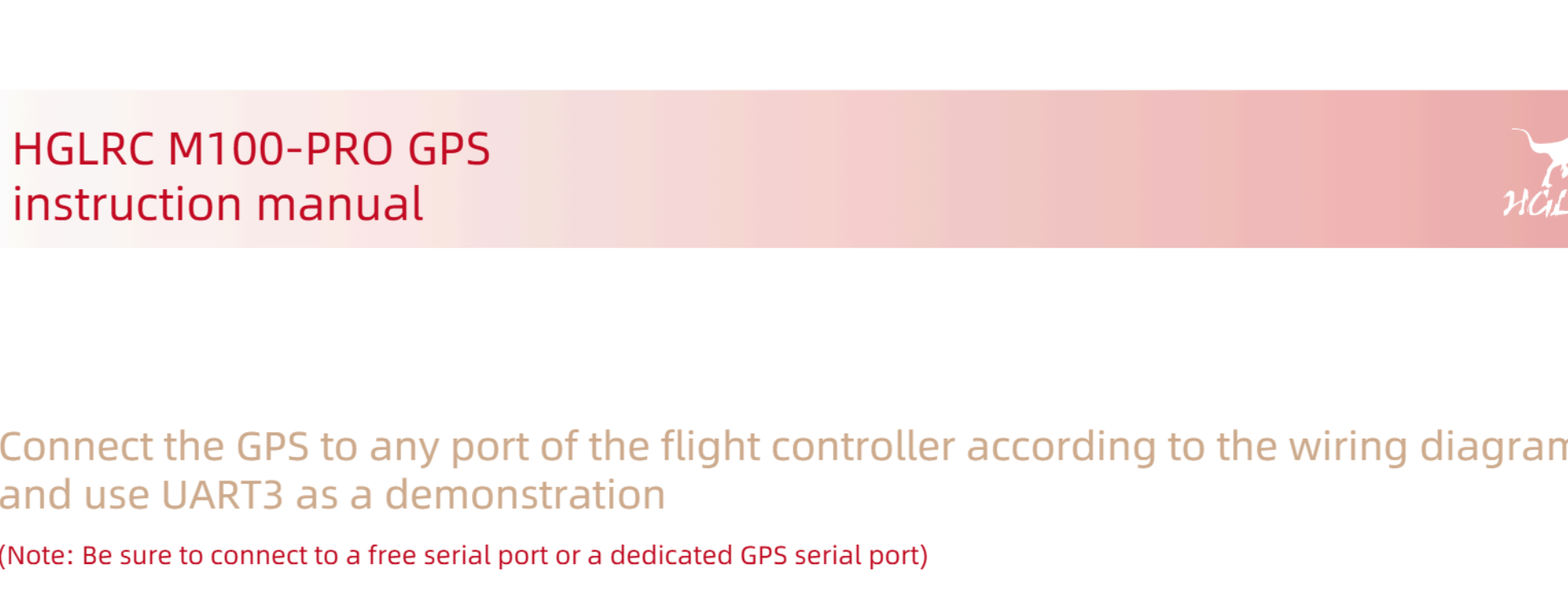


Indicator light	PPS(blue light)	Power(red light)
Normal start	normal bright	normal bright
Real position accuracy	Flickering	normal bright

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## Wiring diagram



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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)

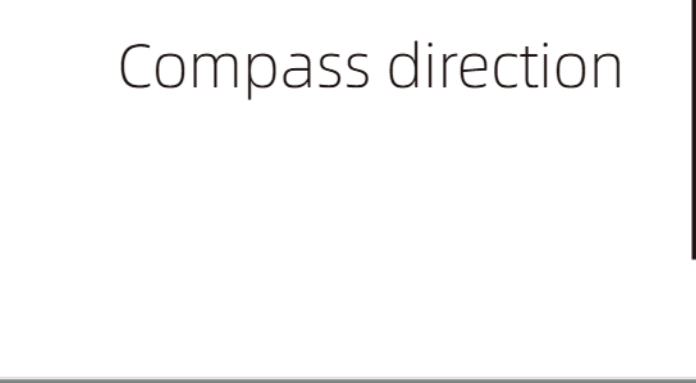
## Betaflight settings

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

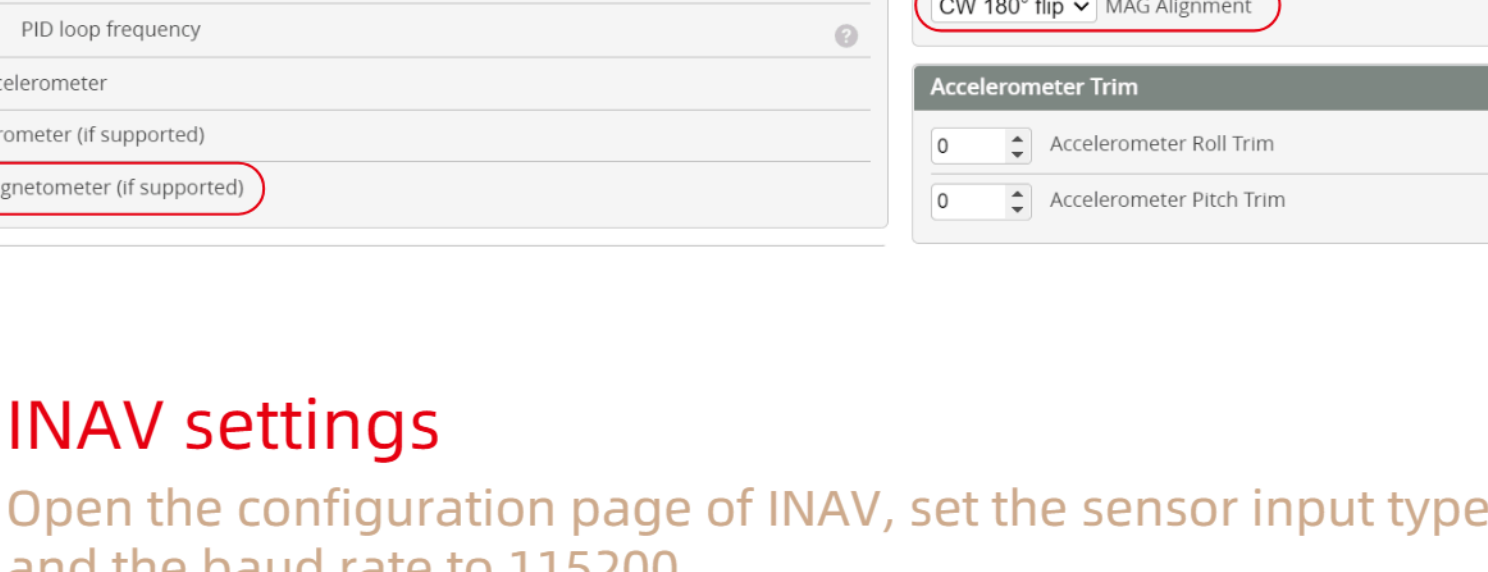
Find UART3, turn on GPS at sensor input and select baud rate 115200

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	.....	.....	Disabled	AUTO
UART1	115200	.....	.....	Disabled	AUTO
UART2	115200	.....	.....	Disabled	AUTO
UART3	115200	.....	.....	GPS	115200
UART4	115200	.....	.....	Disabled	AUTO
UART5	115200	.....	.....	ESC	AUTO

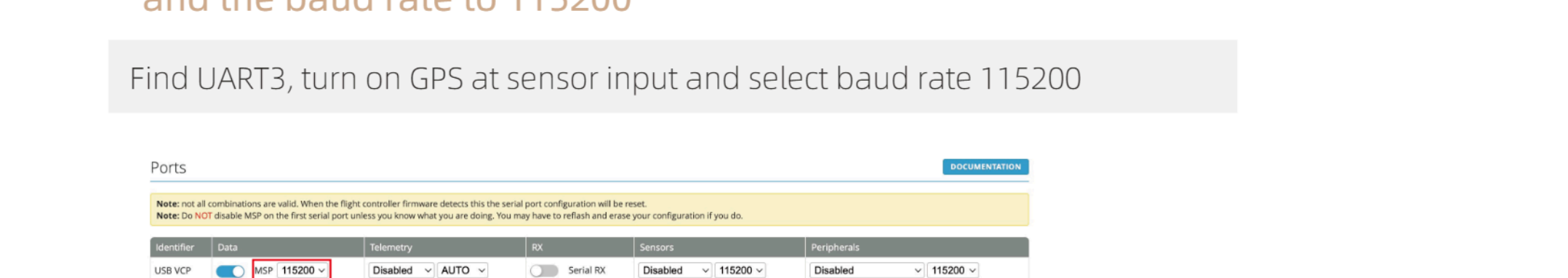
Turn on GPS and enable UBLOX protocol



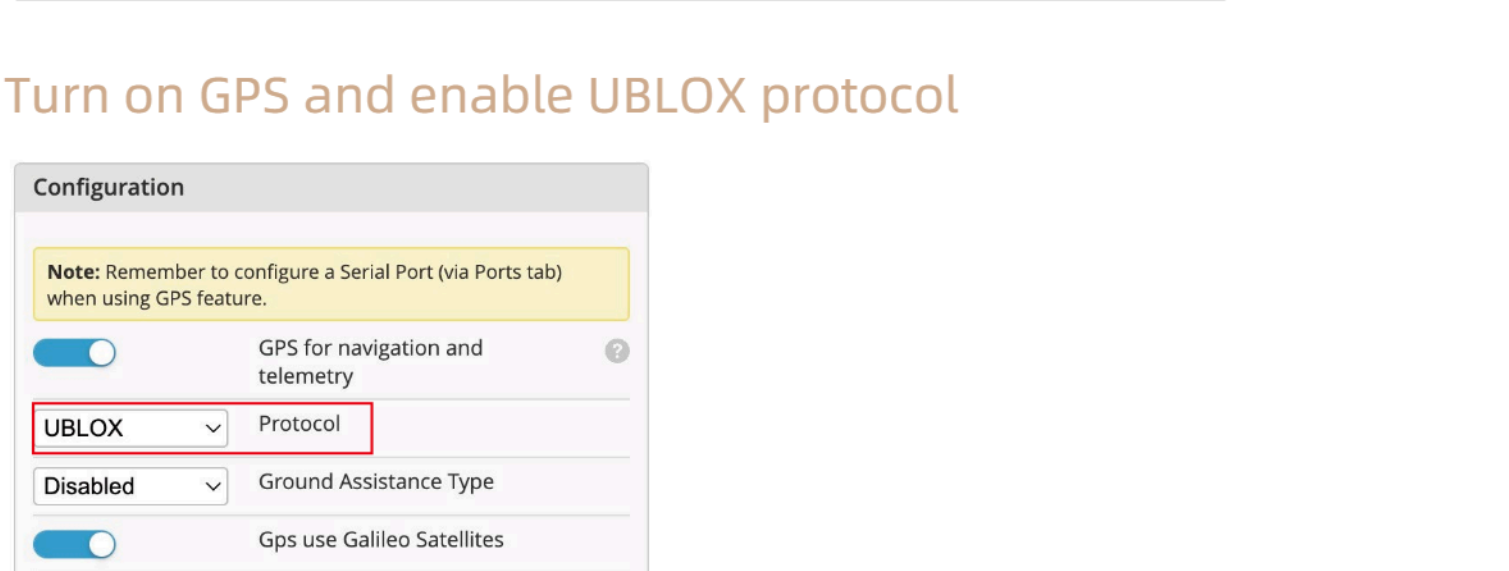
Power on the aircraft, the indicator light will be on when the GPS is working normally, and the GPS logo on the top of Betaflight will be on



Compass direction



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

Sincerely thanks for everyone trust! Welcome to choose HGLRC products



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