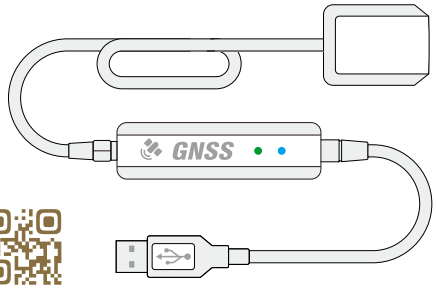
COLUMBUS™

GB

P-7 Pro

Professional HD GNSS Receiver

Quick Start



CAUTION

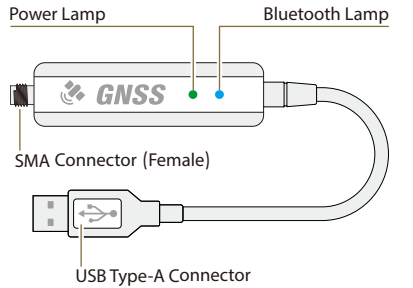
Thank you for choosing our product.

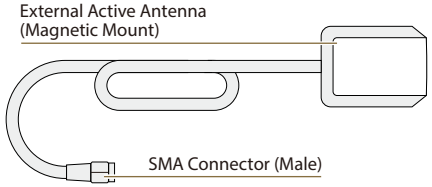
This manual is intended to guide you through the safe and correct use of the product and its accessories, avoiding improper operations that may result in injury of yourself or any other person or cause device damage.

As a precision electronics, the product contains no component that can be repaired by your own. Any attempt to disassemble the product will void the original manufacturer's warranty.

The protection class of the external active antenna is IP66, which can work normally in all-weather environments such as rain, snow and high dust, but do not immerse the antenna completely in water. The main unit of the P-7 Pro is not waterproof.

Parts Description





● Power Lamp

- Power on: Always on

● Bluetooth Lamp

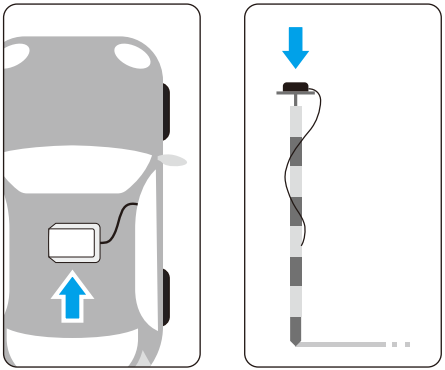
- Connected: always on
- Disconnected: off

The positioning status of the satellite needs to be viewed on the terminal device.

Steps to Use

1 Connect the P-7 Pro to the external active antenna, and tighten the antenna connector clockwise.

2 Place the external active antenna in a position with a good view of the sky, such as the roof of the car, the top of the surveying pole.

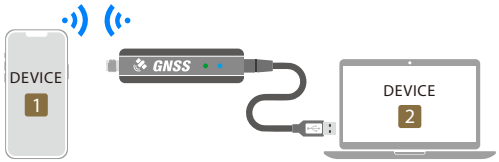


The main unit of the P-7 Pro is not waterproof.

The placement of the antenna significantly affects the accuracy of the tracks. For more placement suggestions, please visit: cbgps.com/p7/q

Connect to the Terminal Device

The P-7 Pro supports two connection modes: wired and wireless. Both connection modes are supported to connect the device simultaneously.

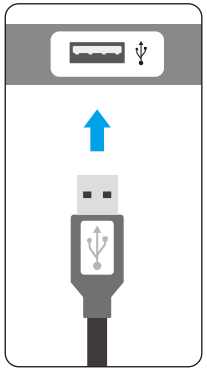


The operating systems and connection modes supported by the P-7 Pro are as follows:

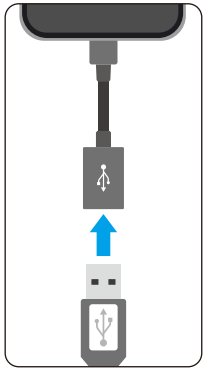
Windows *USB* *SPP*	macOS *USB* *SPP*	Linux *USB* *SPP*
iOS *BLE*	android *USB OTG* *SPP/BLE*	iPadOS *BLE*

1 Wired Connection

Plug the USB connector into the computer.



Plug the USB connector into the mobile device via an OTG cable.

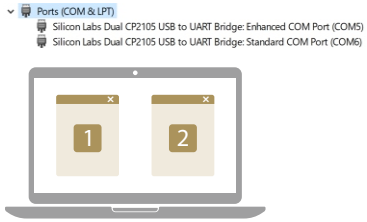


When wired, it supports hardware-level dual serial ports: "Enhanced COM Port" and "Standard COM Port".

The P-7 Pro can be accessed by two programs simultaneously, and the parameters of the P-7 Pro can be configured through the Enhanced COM Port.

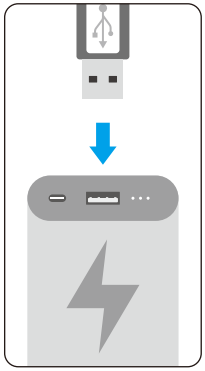
How to connect with terminal device please visit:

cbgps.com/p7/q

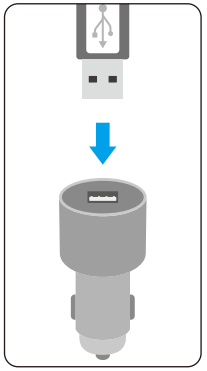


2 Bluetooth Connection

Connect with the power bank during portable use.



Connect with the car charger while driving.



The P-7 Pro supports two Bluetooth protocols: BLE5.1 and SPP 2.1.

How to connect with the App, please visit:

cbgps.com/p7/q

How to Use the App

The P-7 Pro supports applications for multiple platforms, please refer to the support page for usage.

We will continuously update the list of supported App.

cbgps.com/p7/q

App Store

Google Play

Specifications

Protection class	External Active Antenna IP66
Operating temperature	-20 ℃ to +50 ℃ / -4 ℉ to +122 ℉
Constellation	GPS (L1+L5), GLONASS, Galileo (E1+E5a), QZSS (L1+L5), BeiDou, IRNSS (L5), SBAS
Accuracy *	Horizontal: 0.5m/CEP(50%), 1.5m/CEP(95%) Vertical: ±15m
Acquisition time *	Reacquisition: <2s, Cold start: <34s
Output sentences	Protocol: NMEA-0183 Baud Rate (Default): 57,600bps Messages: GNRMC, GNGGA, GNGSV, GNGSA (Default); GNGLL, GNVTG (Optional)
Geodesics	WGS84
Update rate	1Hz (Default), 5Hz
Bluetooth	SPP 2.1 BLE 5.1
Connectors	USB device: USB 2.0 Type-A Antenna connectors: SMA
Power consumption	Main unit: DC 5V / 100mA Antenna: DC 3.3V / 20mA
Dimensions (WxHxD)	Main unit: 65 × 18 × 10mm / 2.6 × 0.7 × 0.4in Antenna feeder: 300cm / 9.8feet
Weight	Main unit: 21g / 0.74oz Antenna: 80g / 2.8oz

* The test was done outdoor, in an open area.

On content unmentioned in the instruction, please visit the official website at any time to learn about the latest use skill and information.

Trademark

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution:

Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.