

G4

SOUTH GNSS 2023/11/20

**Stay Powerful
Anytime
Anywhere**



Content



Hardware and Accessories



The 6 Improvements



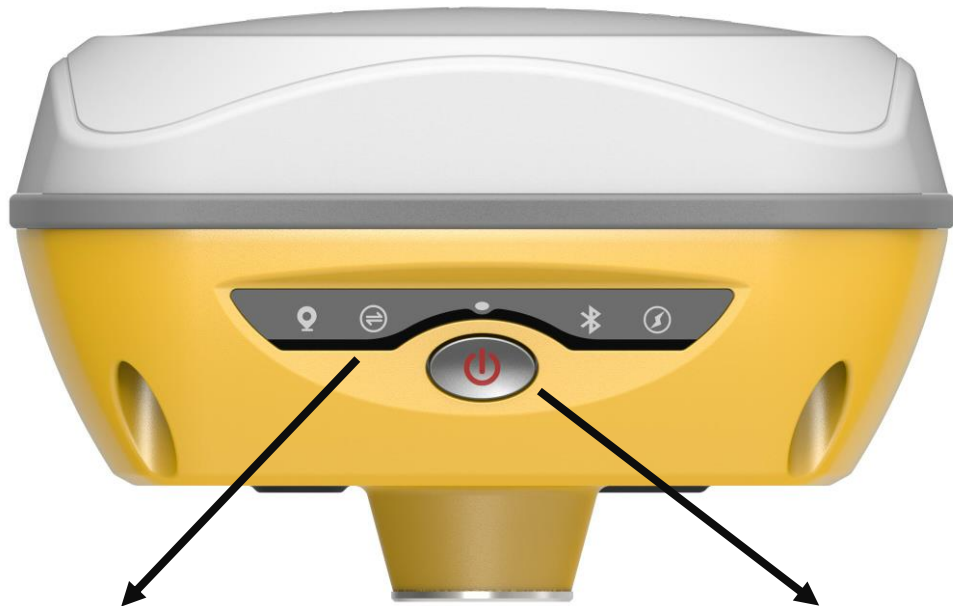
Functions to Be Added

Part 1

Hardware and Accessories



G4 Overview



Indicator Panel

Power Button



NFC



G4 Overview



UHF

5-pin LEMO

Type-C+ SIM card slot



G4 Base and Accessories



- ✓ Carrying Case for Base
- ✓ G4 Receiver
- ✓ Height Measurement Plate
- ✓ 30cm Support Pole
- ✓ UHF Antenna
- ✓ PD Charger and Cable
- ✓ Connector
- ✓ Spacer



G4 Rover and Accessories



- ✓ Carrying Case for Rover
- ✓ G4 Receiver
- ✓ Height Measurement Plate
- ✓ Type-C cable
- ✓ UHF Antenna
- ✓ PD Charger and Cable
- ✓ Carbon Fiber Pole
- ✓ Connector



G4 Rover + Base and Accessories



- ✓ Carrying Case for Rover +Base
- ✓ G4 Receiver * 2
- ✓ Height Measurement Plate * 2
- ✓ Type-C Cable
- ✓ UHF Antenna * 2
- ✓ PD Charger and Cable * 2
- ✓ Carbon Fiber Pole
- ✓ 30cm Support Pole
- ✓ Connector * 2
- ✓ Spacer



Content



Hardware and Accessories



The 6 Improvements



Functions to Be Added

Part 2

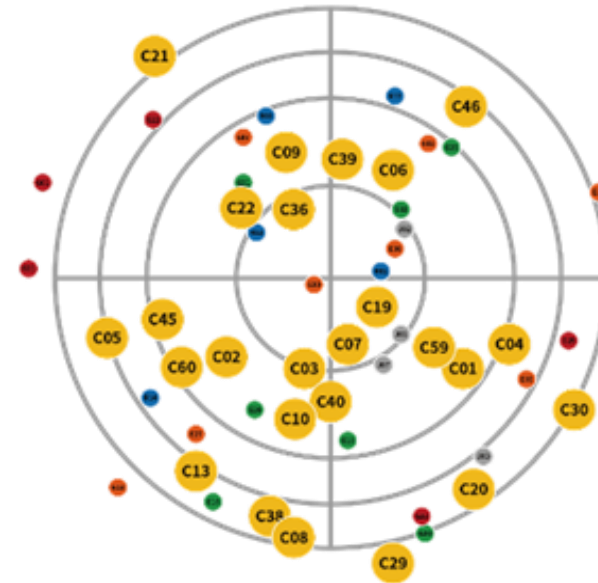
The 6 Improvements



1. S805: More Channels, More Speed and Stability in Fixed Solutions

What is Updated:

1. **1698** channels
2. Improved **multi-satellite positioning algorithm**



- 中国 BDS
- 美国 GPS
- 欧洲 Galileo
- 俄罗斯 GLONASS
- 日本 QZSS

Benefits:

1. The increase in channels enables **faster tracking on available satellites and capturing weak signals.**
2. In dense forests or surrounded by buildings, G4 has a **better success rate and speed** in obtaining fixed solutions than the previous generation of products.



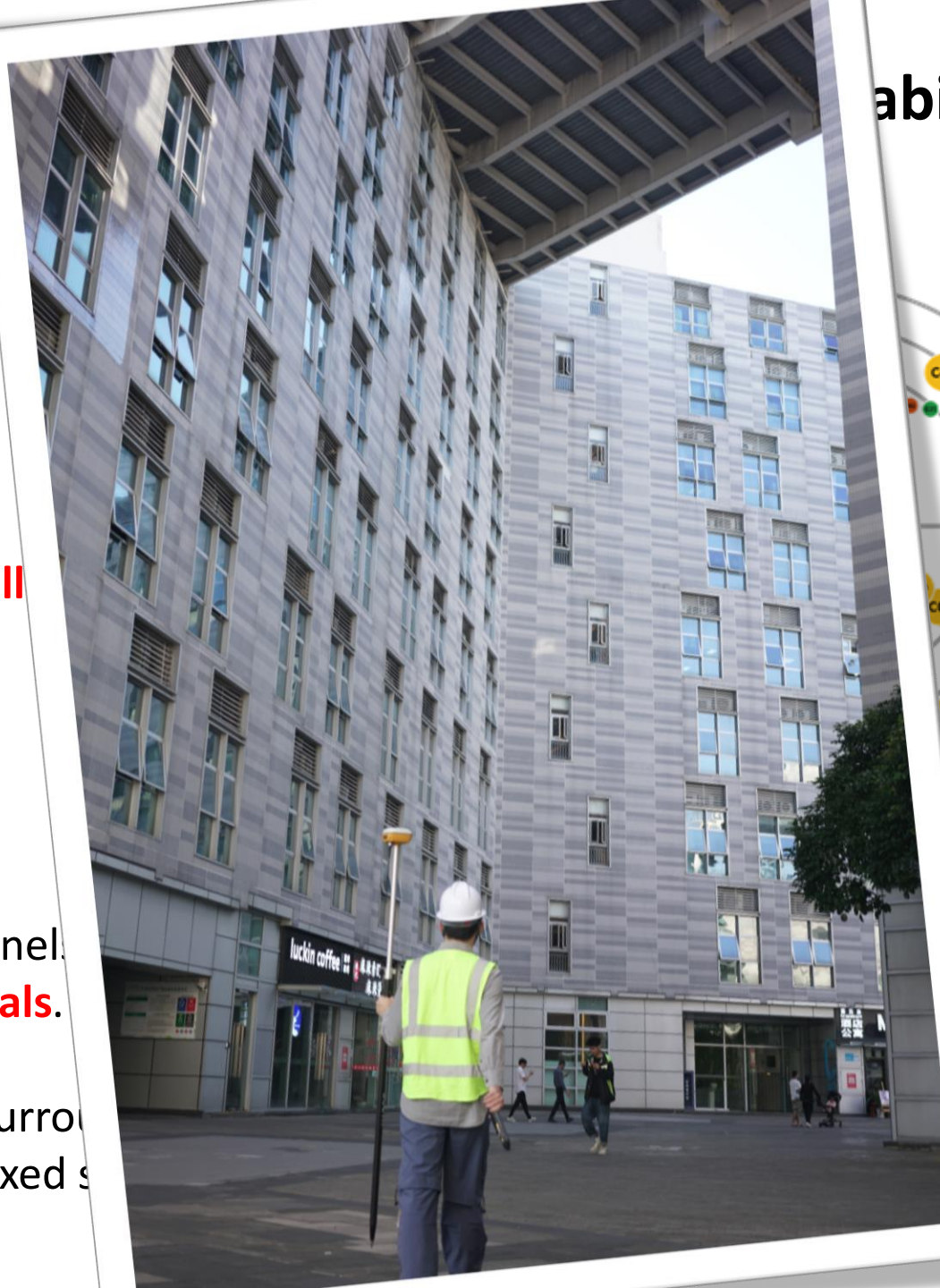
1. S805: Modem in Fixed Solution

What is Updated:

- 1. **1698** channels
- 2. Improved **multi-satellite**

Benefits:

- 1. The increase in channels **capturing weak signals.**
- 2. In dense forests or surrounding buildings, **speed** in obtaining fixed solution.



ability



- 中国 BDS
- 美国 GPS
- 欧洲 Galileo
- 俄罗斯 GLONASS
- 日本 QZSS

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1. S805: More Channels, More Speed and Stability in Fixed Solutions





2. Farlink 2.0: Less Limitation, More Performance

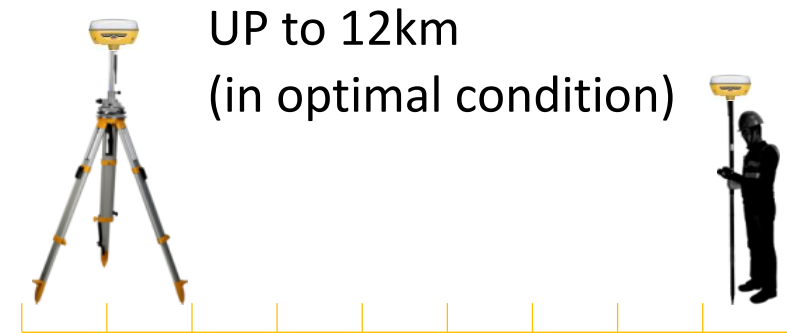
What is Updated:

1. The core components, firmware, and working parameters of radios are **updated at least twice a year**
2. **Lock one specific base** even if other bases are the same frequency
3. Extreme temperature-changing tests from **-20°C to 60°C**



Benefits:

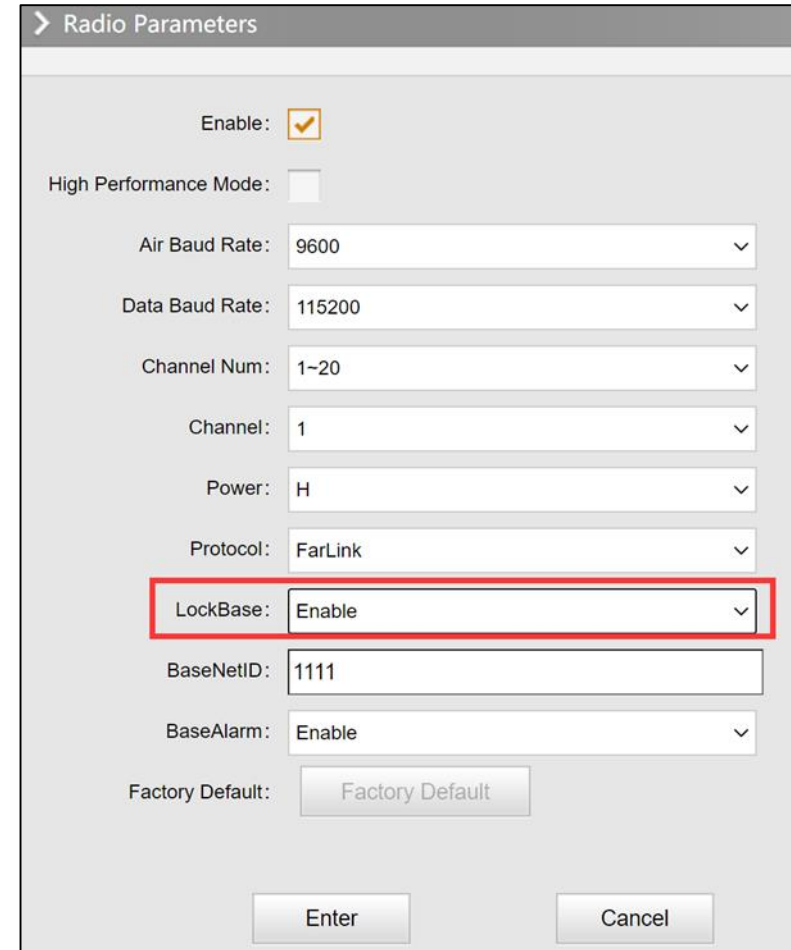
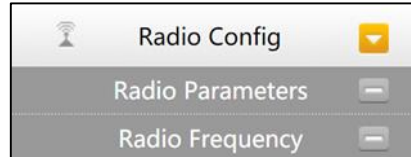
1. Always **optimize for users**
2. Always work with the correct base, **less time wasted**
3. More **durable**





2. Farlink 2.0: Less Limitation, More Performance

Lock Base Function



3. The 4th Generation IMU: Almost All-time Usable

What is Updated:

1. Keep IMU available even when **turning around or rotating the pole**
2. **Calibrate-free initialization**, only need to walk

Benefits:

1. **Efficient** when working with IMU
2. **Time-saving, Convenient**, reduce the time in manually initializing IMU





3. The 4th Generation IMU: Almost All-time Usable





4. Materials: More Robustness and Durability for Work

What is Updated:

1. AZ91D magnesium alloy, **resistant to scratches, impacts, and rust**
2. Silica gel waterproof/dustproof ring
3. Polycarbonate by one-piece molding, **fire resistance and anti-deformation**

Benefits:

Rugged and reliable to undertake tough missions

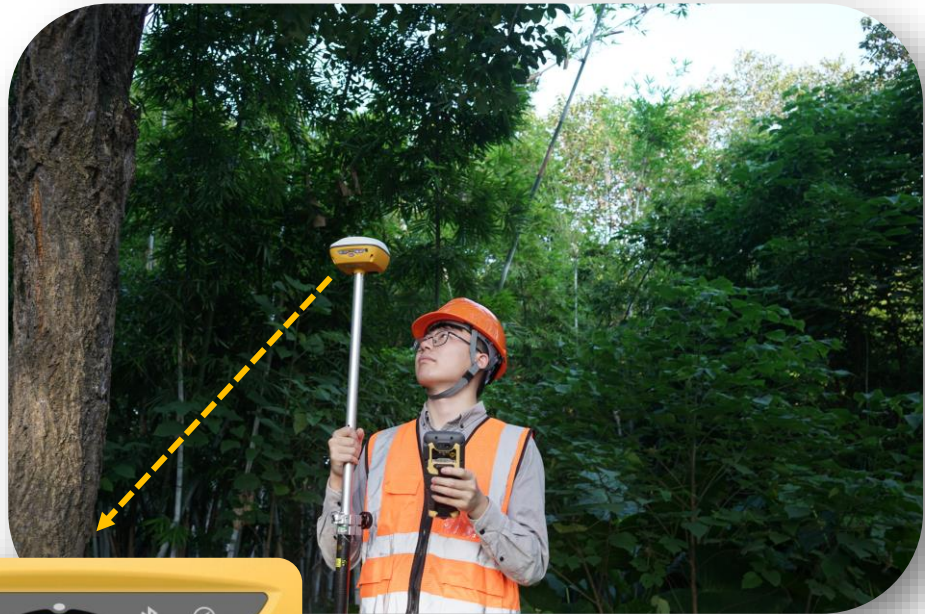




5. Appearance Design: By Surveyors, For Surveyors

What is Updated:

1. **Conspicuous yellow bodywork** according to users' advice
2. Redesigned indicators (icon and color) according to users' feedback



Benefits:

1. Easy-to-recognize color protects surveyors and receivers in cities and forests
2. Check working status clearly even at night or from long distances



5. Appearance Design: By Surveyors, For Surveyors





6. Function Modules: A Guarantee to User's Demand

What is Updated:

1. Complete set of modules installed: network, Bluetooth, WiFi, NFC, IMU, radio
2. Extendable SSD (up to **64GB**), OTG supported

Benefits:

1. Comprehensive functions and usage scenarios: domestic or foreign, have network or not. Work with the appropriate data link.
2. More static data, more accuracy without worry about storage





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Hardware and Accessories



The 6 Improvements



Functions to Be Added

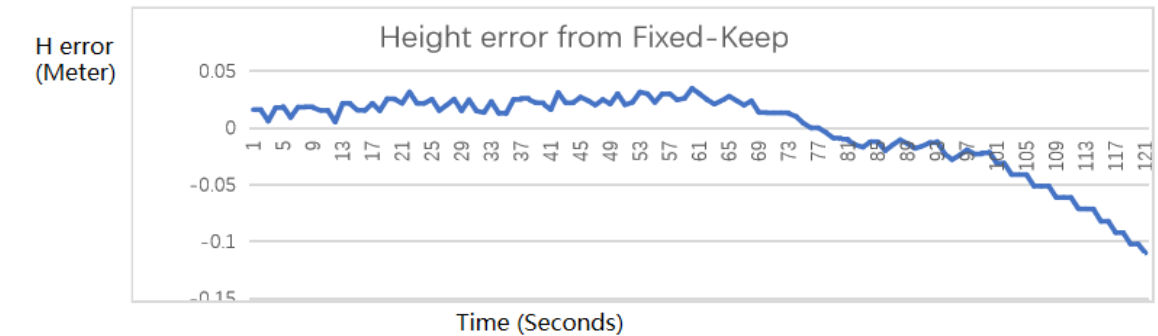
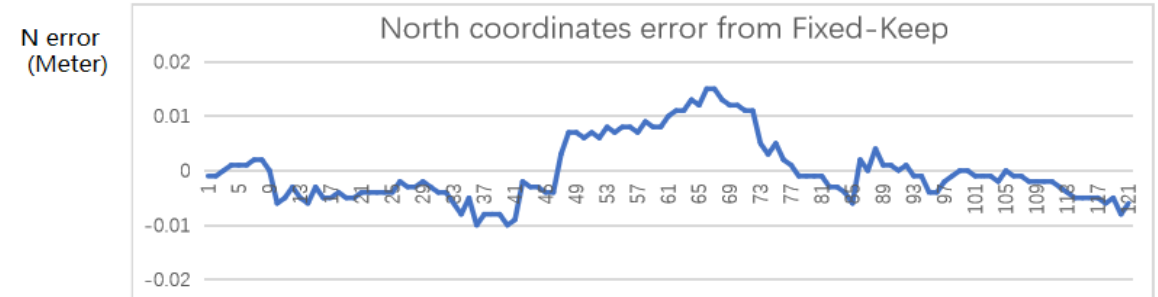
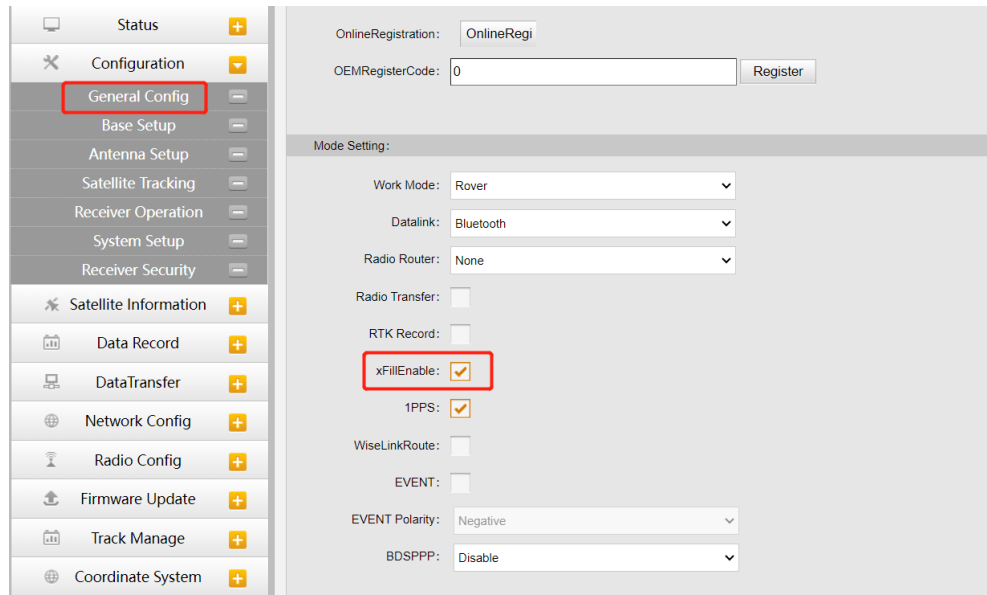
Part 3

Functions to Be Added



Fixed-keep (already added)

- Fixed-keep technology can extend RTK positioning for several minutes while the corrections are interrupted or not available.
- It makes workflow smooth even with poor signals.

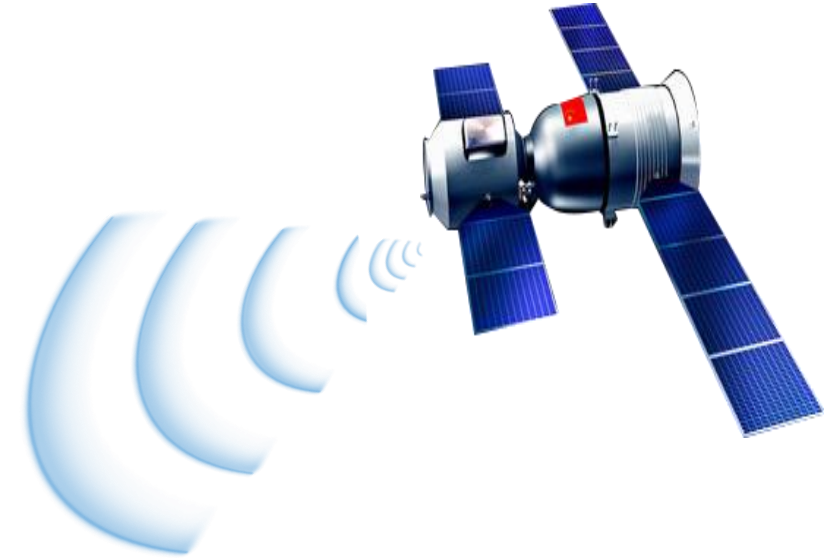




New Functions to be Added



1) Unique SOUTH algorithm deals with ionospheric effect



2) Galileo HAS & Beidou PPP

Benefits

1. Ensure accuracy and stability when the ionosphere is active.
2. Work without CORS corrections, the accuracy can reach decimeter-level

