

# GSM-020 Instruction Manual

## Think you're FAST? Prove it!

**SKYRC**  
SK-500023

### GNSS PERFORMANCE ANALYZER

GNSS Performance Analyzer (GSM020) allows you to measure and analyze many aspects of your RC car & aeroplane's performance using the latest GNSS engine (GPS, GLONASS) which gives you acceleration, G-force, speed, distance and time.

This device uses barometric pressure sensor to detect the height above the ground level. It can measure peak altitude up to 29,500 feet (9000m)

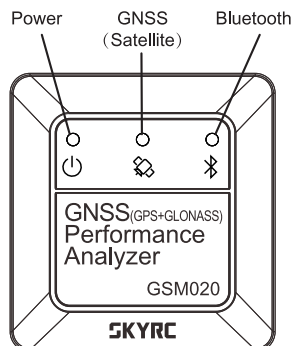
For everyone trying to gauge their performance, here's an affordable way to do just that. Just got some new mods installed? Get some real feedback, really quickly.

Knowledge is power and by knowing the facts before and after modifications, your efforts will not be in vain. GNSS Performance Meter will help you make sense of the improvements and help you make educated decisions to make sure you're not spinning your wheels.

This is a professional-grade instrument accessible to enthusiasts. It's every modeler's dream. Enjoy!

### STATUS OF LED INDICATOR

LED	COLOR	STATUS
Bluetooth	Blue	Bluetooth connected
	Off	Bluetooth disconnected
GNSS	Green	GNSS position fixed
	Off	GNSS position not fixed
Power	White	Working
	Off	Stand by or no power
	Blinking	Charging Battery
	Fast Blinking	Power Low



### CHARGING THE DEVICE BEFORE USE

Charge the device using the provided USB cable, connected either to a powered USB port or USB charger. During charging, the power LED will slowly blinking. Once the internal battery of the device has been fully recharged the Power LED will change to white solid. This should take no more than 3 hours. The battery should last for up to 6 hours of operation. In standby mode, the battery will last for 2 weeks.

### MOUNTING THE DEVICE

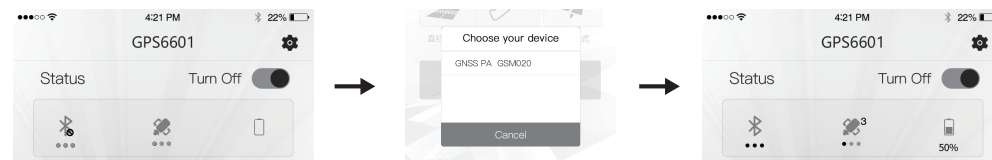
1. Determine where you would like to install the device. The antenna can receive signals through glass and plastic but not metal or other conductive surfaces. To avoid interference, ensure the antenna is not covered or shielded by any metallic object.
2. Make sure the surface is clean. Remove any dirt or debris.
3. Use hook and loop tape to secure the device to the surface.
4. This device uses barometric pressure sensor to detect altitude, so it needs to be exposed to air pressure and don't put it in an airtight container.

### GNSS PERFORMANCE ANALYZER APP

Install the free GNSS Performance Analyzer app from either the App Store or Google Play. This device needs Bluetooth to communicate, so you'll need to turn on Bluetooth.

#### Connect Before Using

When you first launch the app, you will ask to choose the device. Click the Bluetooth Symbol and select the device.



Acquiring satellites signals may take few minutes. The GNSS LED will turn GREEN when it has connected with GNSS satellites.

#### Reconnect After Using

During the testing, you will lose your Bluetooth connection since the connection range is up to 30 feet (10 meter). It is normal for the controls to disappear when your analyzer travels out of range. Don't worry--it's still working and recording! After racing or flight, put your mobile and GNSS performance analyzer closer. The mobile will connect to the analyzer automatically.



GNSS PA

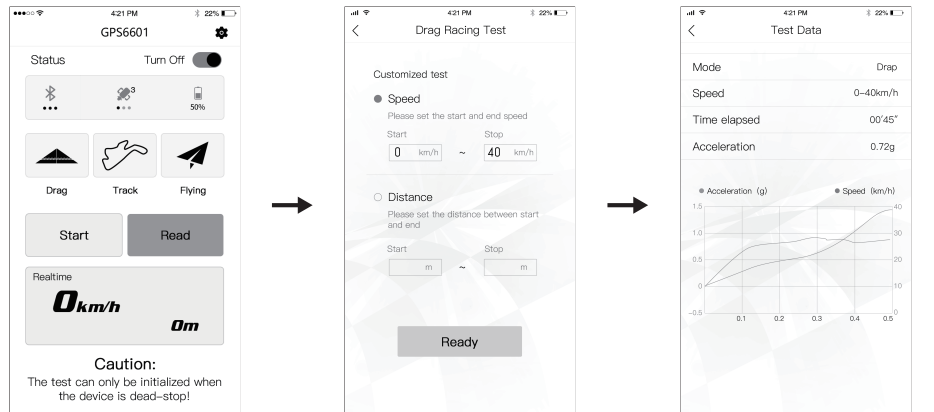


Download the App

## DRAG - TO TELL THE TRUTH BEFORE AND AFTER MODIFICATIONS

### For gear tuning or performance test.

Automatic start/stop logging: The logging behaviour of the device is to automatically start and stop logging. Measuring every run automatically without pressing any button. The device starts logging when satellite lock has been achieved and a speed value higher than 1.0 km/h is detected, and stops logging when pre-setting criteria are achieved.



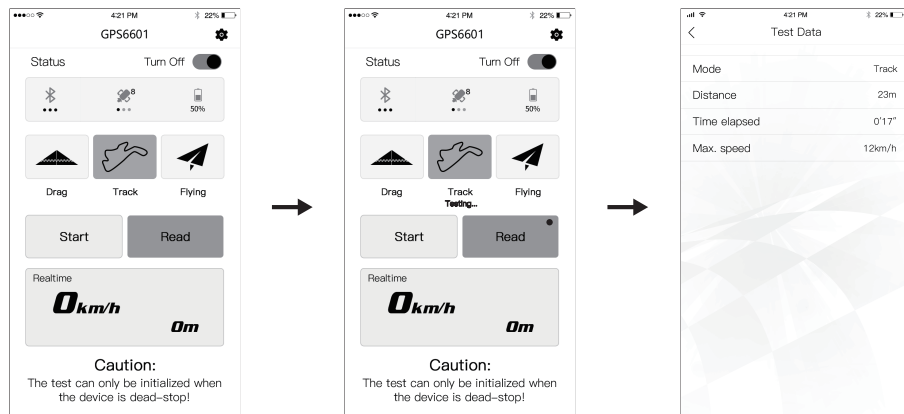
Click "Drag" icon

Custom by yourself  
Measure acceleration (e.g. 0-40 kmh, 10-50 kmh, 10 meters or any custom setting)

Automatically display the "Test Data" when pre-setting criteria are achieved

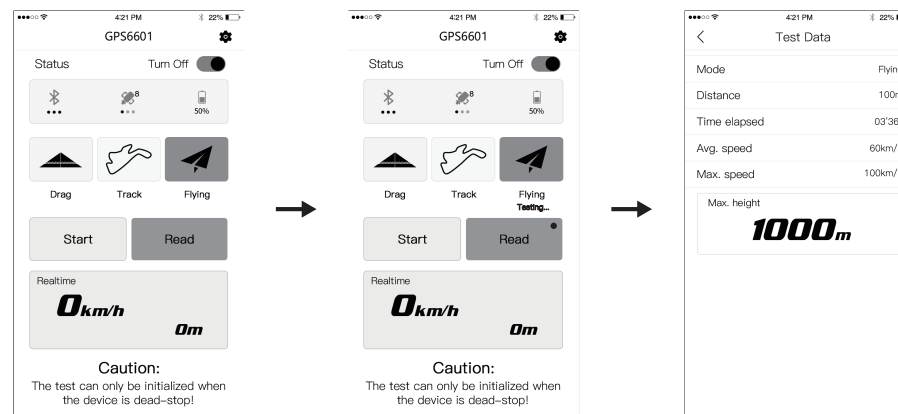
## TRACK - PERFORMANCE TEST

Stop wondering how fast your RC car can run. This device is ideal for RC racing. The user could easily working out data such as speed, total distance. It also records the top speed.



## FLYING - HOW HIGH THINGS FLY & PERFORMANCE TEST

Under "FLYING" mode, you can measure peak altitude to 29,500 feet (9000 m). It is great for planes, quadcopters, rockets, helicopter, gliders and kites.



## SPECIFICATIONS

- Concurrent reception of GPS & GLONASS
- Receiver: L1, 1575.42 MHz
- Update frequency: 10 Hz.
- Antenna type: Built-in
- Satellite signal reception sensitivity: -167dBm
- Dimensions: 39X40X16mm
- Weight: 35g
- Operating temperature: 0°C to +40°C
- Storage temperature: -10°C to +70°C
- Operating humidity: 5% to 90%

## WARRANTY AND SERVICE

**THIS WARRANTY IS ONLY VALID IN THE COUNTRY OF PURCHASE AND THROUGH FORMAL DISTRIBUTOR.**

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we will repair or replace free of service charge for products deemed defective due to those causes. For any repair or replace service, please contact your dealer in the first instance, who is responsible for processing guarantee claims. This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the procedures outlined in this manual.

**SKYRC TECHNOLOGY CO., LTD.**  
www.skyrc.com

All specifications and figures are subject to change without notice.  
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