# **GSM020 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	Power GNSS Blue (Satellite)
Bluetooth	Blue	Bluetooth connected	
	Off	Bluetooth disconnected	
GNSS	Green	GNSS position fixed	
	Off	GNSS position not fixed	
Power	White	Working	GNSS(GPS+GLONASS)
	Off	Stand by or no power	Performance Analyzer
	Blinking	Charging Battery	Reset GSM020
	Fast Blinking	Power Low	SKYRC

#### 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.

Please make sure to charge the battery before its FIRST use and check the battery capacity before EVERY use.

## MOUNTING THE DEVICE

- 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.

GNSS Performance Analyzer are based on the BLE protocol that the device can only be searched and connected by our own app!

Please get reminded that we never try to connect GNSS via Phone's>Setting>Bluetooth! With your phone's Bluetooth enabled, launch the APP "GNSS PA", search and connect the GNSS inside the APP.

#### **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.



Download the App

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

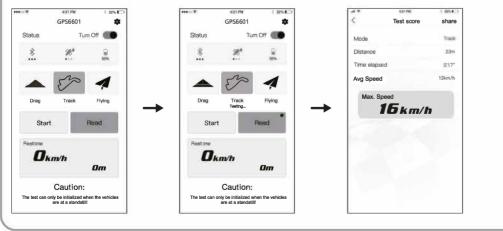
## For gear tuning or performance test.

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 devices 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 criterias are achieved.



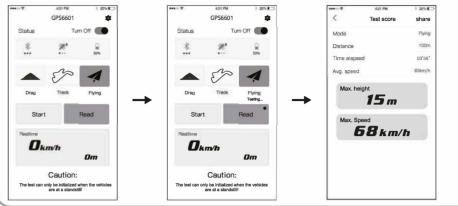
## TRACK - PERFORMANCE TEST

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 measures 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 humidety: 5% to 90%

#### **COMPLIANCE STATEMENT**

The manufacturer hereby declares that the product complies with the basic requirements and other relevant provisions of the EU directives. Old electronic devices are raw materials and do not belong in household waste. If the product has reached the end of its service life, please dispose of it at Your local collection point in accordance with the applicable legal regulations. Disposal in the household garbage is prohibited.

#### Importeur / Imported by:

Robitronic Electronic Ges.m.b.H., Pfarrgasse 50, 1230 Vienna, Austria Tel.:+43 (0)1-982 09 20, Fax.: +43 (0)1-98 209 21

## Hersteller / Manufactured by:

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#### EU Compliance Statement:

SkyRC Technology Co,. Ltd. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the Directive 2014/53/EU. A copy of the EU Declaration of Conformity is available online at https://www.skyrc.com/downloads

SKYRC TECHNOLOGY CO., LTD.

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