

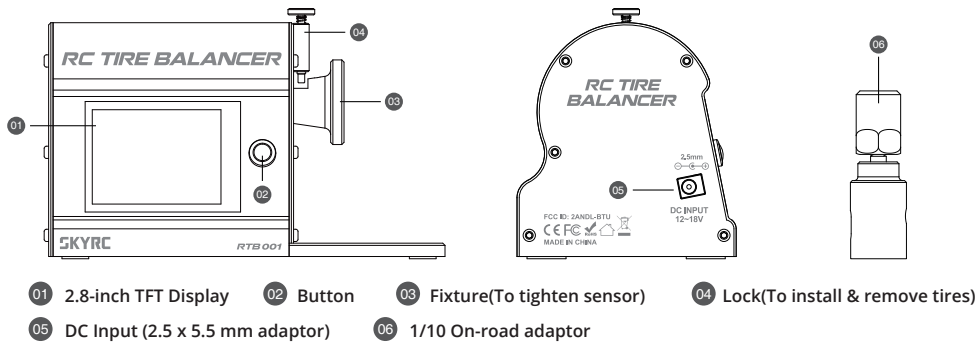
# Instruction Manual

## RC TIRE BALANCER

RTB001  
V1.1

### Getting Started:

Discover the RTB001, a cutting-edge, high-precision dynamic balancer tailored for RC tires. With high-precision sensors and precise stepping motors, this balancer sets new standards for weighing and positioning deficiencies with accuracy. Tailored for 1/10 and 1/8\* On-Road cars, RTB001 ensures comprehensive dynamic balance detection. The large 2.8-inch TFT display provides clear and detailed information at a glance, and the intuitive interface enables you to navigate effortlessly. The built-in Bluetooth lets users control the balancer via the RC Gears app. With the RTB001, achieve optimal tire performance with visual data like never before!



\*Note: 1/10 on-road adaptor is included. 1/8 on-road adapter is sold separately!

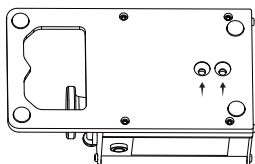
### Cautions:

RTB001 is a high-precision instrument. Before use, pay attention to the following guidelines to ensure the optimal performance and longevity of the RTB001 instrument.

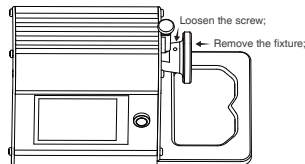
1. Avoid exerting force on the protruding part of the motor shaft in any direction, even when installing the adaptors and tires. Forcing it may lead to damage to the internal sensor.
2. Ensure that the operating surface is stable and free from vibrations. Ideally, place the instrument on a firm and level surface.
3. Maintain a moderate airflow around the instrument and avoid exposing it directly to large objects such as air conditioners or fans.
4. During usage, transportation, and storage, take precautions to prevent the instrument from falling or being subjected to excessive vibrations.
5. When the instrument is not in use, kindly remove the tire from the adaptor and disconnect the power supply.
6. It is strictly prohibited to touch the tire or forcibly stop the motor during detection rotation, as this may cause damage to the motor and sensor.

### Operation:

-Install (To reduce the probability of damage to the sensor during transportation, the fixing screws of the sensor are not fully tightened during shipping and need to be tightened before use.)



Step 1: Tighten the screws.



Step 2: Loosen the screw to remove the fixture.

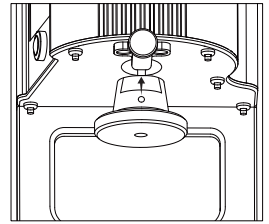


Cautiously tighten the screw until it comes to a stop, and ensure that the mark line on the screw aligns perfectly with the base's mark line. This indicates that the screw is now secure and properly tightened, ensuring a safe and stable connection.

To correct a skewed motor shaft when the screw becomes loose during use, follow these steps:

1. Remove the tire and the adaptor.
2. Loosen the two screws on the base.
3. Place the fixture in place and securely fasten with screws, as shown in the picture.
4. Now, tighten the two screws.
5. Loosen the fixture's screw and remove the fixture.
6. Check and adjust the motor shaft to ensure it is correctly centered. Tighten the adaptor.

(Flat on the motor's D-shaft faces up. Align the fixture's screw onto the D-shaft's flat firmly.)



·Get a Power Supply Ready

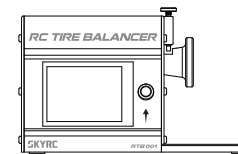
The balancer requires a 12-18V DC power supply with pin of 2.5mm internal diameter. If the power supply falls outside this specified voltage range, a warning prompt will prompt.

**WARNING**  
Abnormal Input Voltage

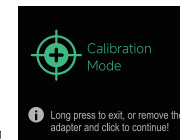
Input:12-18V

·Calibration

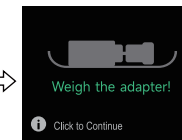
Once the balancer is installed, if you encounter any accuracy issues that environmental changes may have caused during the initial use or throughout the operation, please proceed with the calibration process.



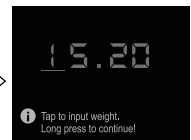
Step 1: Power on with the button pressed;



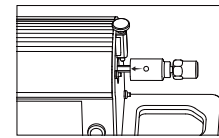
Step 2: Shortly press the button to continue;



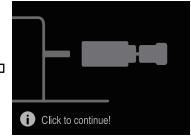
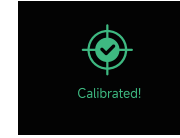
Step 3: Weigh the adaptor and short-press to continue;



Step 4: Key in the weight of the adaptor (Short-press to key in, press to switch the unit);



\*Mount the adaptor: Align the screw's position with the D-shaft's flat firmly secure it with the fastening screw.



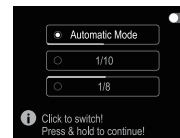
\*Step 5: Put on the adaptor and tighten it with the screw.

Upon completing the calibration, shortly press the button to access the normal checking mode.

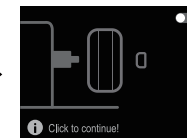
### Tire Balancing:

1. Self-Check Test:

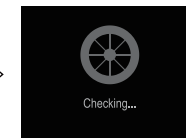
The startup screen will be displayed upon powering on, followed by the tire model selection page. The default mode is "Automatic Mode". Press and hold the button to enter the tire installation page. The actual tire is not needed for the self-test. Shortly press the button to start the test. "Checking..." will show during the testing process, and "Balanced" will appear when the self-test is done. If "Balanced" does not appear, calibration is required.



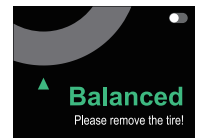
Step 1: The default mode is "Automatic Mode";



Step 2: Prompt to install the tire, click to continue;



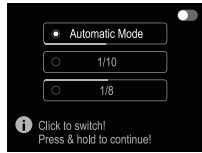
Step 3: Checking...



Step 4: Balanced shows indicating self-test is done;

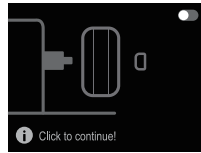
## 2. Tire Checking:

① Choose Tire Type. The startup screen will be displayed upon powering on, followed by the tire model selection page.

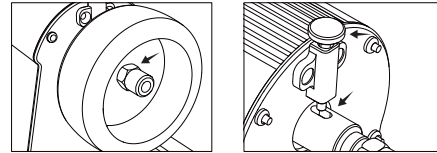


Automatic Mode: The tire type will be detected automatically.  
1/10: 1/10 on-road tire  
1/8: 1/8 on-road tire  
The default mode is "Automatic Mode".

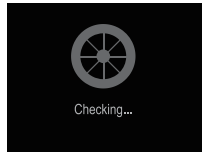
② Tire Installing



Twist off the nut on the tire adaptor. Ensure that the hexagon of the nut matches the hexagon of the tire. Press the lock on the balancer to secure the adaptor. Twist the nut clockwise to attach the tire to the adaptor. Wait 3-5 seconds and then short press the button to enter the next step.

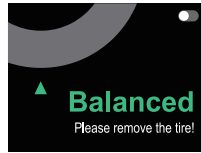


③ Checking



The motor will perform 25 clockwise rotations while ensuring the table remains level, vibration-free, and with minimal airflow. DO NOT TOUCH the tires or forcefully brake the motor throughout this process.

④ Result

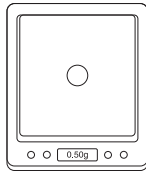


Balanced: Press the locker to twist the nut counterclockwise to remove. Short-press to return, or you can turn off the power.

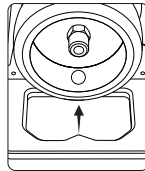


Imbalanced: Weigh the balancing putty to match as indicated on display and shape the putty into a ball if needed. Affix the weight on the tire as the notch arrow indicates at the bottom plate.

⑤ Countweighing



Weigh the putty to match as indicated on display.



Position to counterweigh: inside the rim of the tire, as the notch arrow indicates at the bottom plate.

⑥ After putting the counterweight as prompted, users probably need to conduct it repeatedly to get balanced. This process may require iteration when certain tires have multiple counterweight points. After adding weight, press the button again to perform the test.

Hold and press the button to return to the Tire Type page.

## Connect to the App:

Scan the QR code to install the RC Gears app.



RC Gears app



After the balancer is powered on and the start-up screen is displayed, enable Bluetooth on the smartphone; the app will search and find the balancer and tap the device in the list to connect. (All pages of the App and the displays of the device are fully synchronized and interact with each other seamlessly.)



Select the device to connect



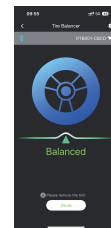
Choose the tire type, tap Next



Install the tire, tap Next



Checking...



Balanced! Tap DONE to return to Tire Type page.

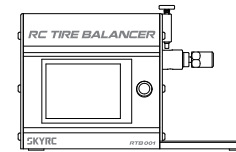


Imbalanced! Tap Exit to return to Tire Type page, or Tap Start Over to check again!

## Tech. Specs.

- Voltage: DC12V~18V
- Standby Current:  $\leq 70\text{mA}$
- Working Current:  $12\text{V}/\leq 750\text{mA}$   $18\text{V}/\leq 550\text{mA}$
- DC Input Interface:  $\varnothing 5.5\text{mm}$  DC Jack with 1.D 2.5mm pin, inner Positive(+), outer Negative(-).
- Compatible Tires: 1/10 & 1/8 on-road
- Display: 2.8-inch TFT
- Size: 178(L)\*99(W)\*106(H)mm
- Communication: Bluetooth 5.0
- Transmission distance:  $\leq 15\text{m}$
- Working temperature:  $0^{\circ}\text{C}\sim 40^{\circ}\text{C}$
- Working humidity: 10%~80% (Non-condensing)
- Storage temperature:  $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- Storage humidity: 20%~70% (Non-condensing)
- Weight: about 800g

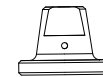
## What is included:



RC Tire Balancer\*1



1/10 tire adapter\*1



Fixture\*1



DC power cable\*1



Manual\*1



Balancing Putty\*10g



Carrying Case\*1

## WARRANTY AND SERVICE

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. 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.

Note:

The warranty service is valid in China only.

If you need warranty service overseas, please contact your dealer in the first instance, who is responsible for processing guarantee claims overseas. Due to high shipping cost, complicated custom clearance procedures to send back to China. Please understand SkyRC can't provide warranty service to overseas end user directly. If you have any questions which are not mentioned in the manual, please feel free to send email to support@skyrc.com

Manufactured by SkyRC TECHNOLOGY CO., LTD.



The manual is subject to change without notice; please refer to our website for the latest version!

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www.skyrc.com

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