

[Manuals.plus](#) /

› [Koso](#) /

› KOSO GP Style EVO Digital Tachometer Instruction Manual for Yamaha Aerox/MBK Nitro

Koso KO-BA511K00

KOSO GP Style EVO Digital Tachometer Instruction Manual

Model: KO-BA511K00 for Yamaha Aerox / MBK Nitro

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your KOSO GP Style EVO Digital Tachometer. Designed specifically for Yamaha Aerox and MBK Nitro models, this advanced digital display offers comprehensive vehicle data in a modern, clear format. Please read this manual thoroughly before installation and use to ensure proper function and longevity of the product.

PRODUCT OVERVIEW

The KOSO GP Style EVO Digital Tachometer is an evolution of KOSO's digital speedometer units, featuring an LED-backlit display and a transparent housing. It integrates seamlessly into the existing cockpit of your scooter.



Image: KOSO GP Style EVO Digital Tachometer and its components, including wiring and temperature sensor.

Key Features:

- **High-Resolution LED Display:** Ensures clear and readable data day and night.
- **Comprehensive Data Display:** Shows speed, RPM, total and trip mileage (ODO/Trip), temperature, fuel level, clock, and voltmeter.
- **Analog Tachometer:** Large analog RPM display with digital and variable RPM range (up to 10,000 or 15,000 RPM).
- **Digital Speedometer:** Displays speed up to 199 km/h, switchable to digital temperature display.
- **Programmable Warnings:** Overheating and RPM warnings to protect the engine.
- **Customizable Backlight:** 8 selectable LED colors (red, orange, yellow, green, blue, light blue, purple, white) with adjustable brightness.
- **Self-Test Function:** Performs a complete self-test and re-initializes before each restart.
- **Integrated Indicators:** Fuel gauge, turn signal indicators, high beam indicator, and odometer.

SETUP AND INSTALLATION

The tachometer unit is designed for easy integration into the existing cockpit. It is compatible with Yamaha Aerox and MBK Nitro models that have an analog original tachometer, as well as Aerox and Nitro 100 models. For special models (e.g., Rossi editions) that already have a digital tachometer, specific cable adapters and a tachometer cable may be required and are available separately.



Image: Front view of the KOSO GP Style EVO Digital Tachometer, showing the display layout.

Important Installation Notes:

- **Professional Installation:** Due to past issues with incorrect installations, the manufacturer requires proof of professional installation by a workshop if the item is returned due to a defect. Please include this proof with any return.
- **RPM Limiter Compatibility:** The tachometer must **not** be used in combination with an RPM limiter, as this can lead to a defect in the tachometer.
- **Temperature Sensor:** The tachometer must only be operated with the Koso temperature sensor.
- **Spark Plug:** Use only a suppressed spark plug (e.g., NGK BR) with this unit.

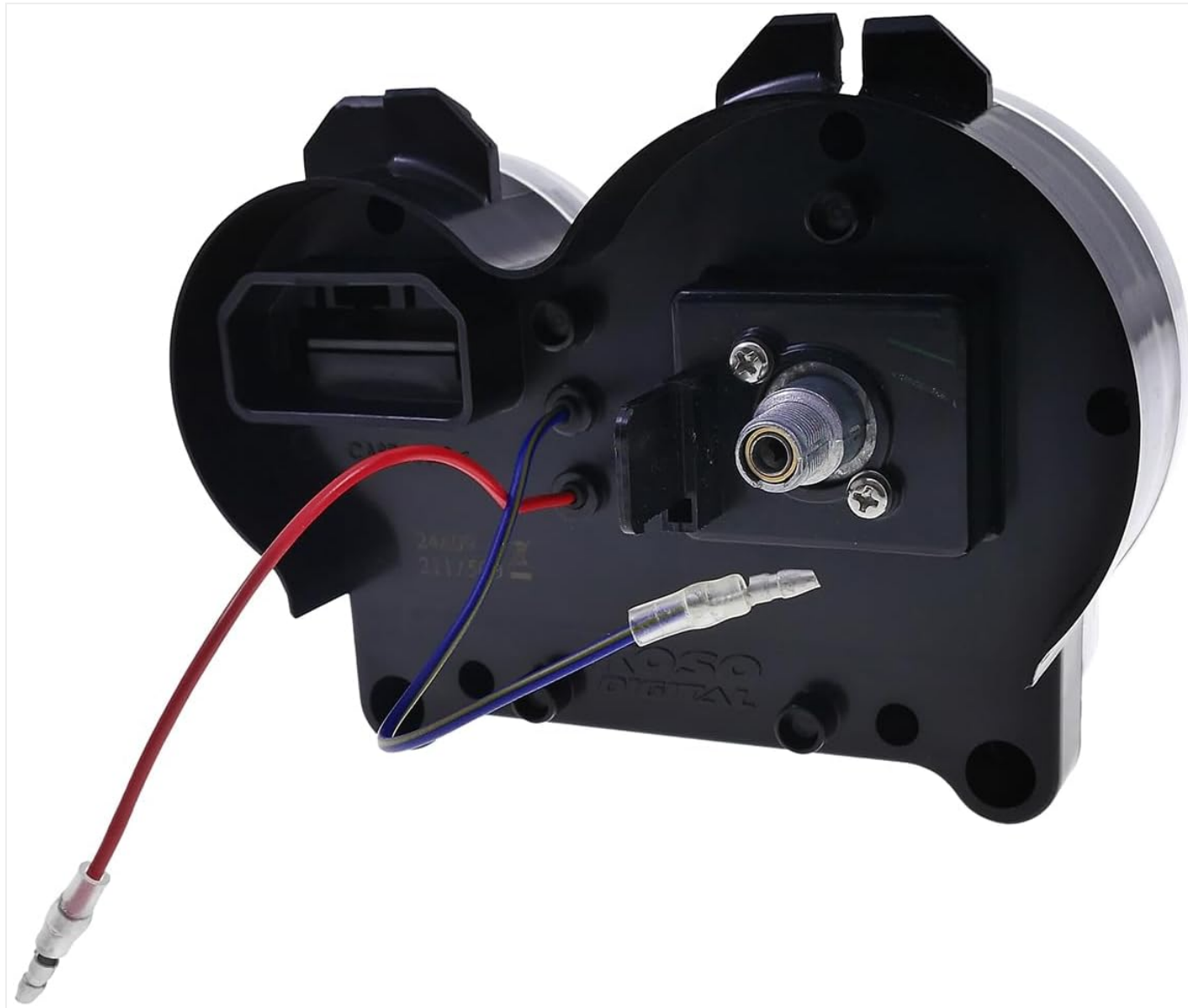


Image: Rear view of the KOSO GP Style EVO Digital Tachometer, illustrating the connection points for wiring.

Installation Steps (General):

1. Remove the original tachometer unit from your scooter's cockpit.
2. Connect the KOSO GP Style EVO Digital Tachometer wiring harness to the scooter's electrical system. Ensure all connections are secure and correct according to the wiring diagram (not provided in this manual, refer to product packaging or Koso's official resources).
3. Install the Koso temperature sensor as per the manufacturer's instructions.
4. Mount the new tachometer unit into the cockpit opening.
5. Secure the unit using the provided fasteners.
6. Perform a functional test to ensure all displays and indicators are working correctly.

OPERATING INSTRUCTIONS

The KOSO GP Style EVO Digital Tachometer offers various functions accessible via its control buttons.

Initial Power-On and Self-Test:

Upon turning on the ignition, the instrument performs a complete self-test and re-initializes. This ensures all functions are ready for operation.

Display Modes and Switching:

- The large analog display shows RPM.
- The digital display on the right primarily shows speed.
- Pressing a control button (refer to the specific button layout on your unit) allows you to switch the digital display between speed and digital temperature readings.
- Other functions like ODO (total mileage) and Trip (trip mileage) are typically cycled through with short presses of a mode button.

Backlight Color and Brightness Adjustment:

The backlight color can be selected from 8 different options: red, orange, yellow, green, blue, light blue, purple, and white. The brightness is also adjustable. Consult the specific button functions on your device for how to access and change these settings.

Programmable Warnings:

The unit features programmable overheating and RPM warnings. These can be set to alert you when critical thresholds are reached, helping to prevent engine damage. Refer to the detailed programming instructions in the full product manual (if provided separately) for setting these parameters.

MAINTENANCE

To ensure the longevity and optimal performance of your KOSO GP Style EVO Digital Tachometer, follow these general maintenance guidelines:

- **Cleaning:** Clean the display and housing with a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the plastic.
- **Connections:** Periodically check all electrical connections to ensure they are secure and free from corrosion.
- **Environmental Protection:** While designed for outdoor use, avoid prolonged exposure to extreme weather conditions when possible.
- **Sensor Integrity:** Ensure the temperature sensor and its wiring are undamaged and properly seated.

TROUBLESHOOTING

If you encounter issues with your KOSO GP Style EVO Digital Tachometer, consider the following common troubleshooting steps:

- **Display Not Lighting Up:**
 - Check the power supply and all electrical connections.
 - Ensure the ignition is on.
 - Verify the backlight brightness setting.
- **Incorrect Speed/RPM Reading:**
 - Ensure the speed sensor and RPM signal wire are correctly connected.
 - Verify that the tachometer is not used with an RPM limiter, as this can cause malfunctions.
 - Check for proper calibration settings (if applicable, refer to the full manual).
- **Temperature Reading Issues:**
 - Confirm that only the Koso temperature sensor is installed and correctly connected.

- Check the sensor wiring for damage.

• **Unit Freezes or Malfunctions:**

- Turn off the ignition, wait a few seconds, and then restart the scooter. The unit performs a self-test upon restart.
- Ensure a suppressed spark plug (e.g., NGK BR) is used to prevent electrical interference.
- If issues persist, consult a professional technician.

SPECIFICATIONS



Image: Included accessories for the KOSO GP Style EVO Digital Tachometer.

Feature	Detail
Model Number	KO-BA511K00
Material	Acrylonitrile Butadiene Styrene (ABS)
Digital Speed Display	0 - 199 km/h (in 1 km/h increments)
Total Odometer	Up to 99,999 km
Trip Odometer	Up to 999.9 km (in 100m units)
Digital Temperature Display	0°C - 150°C (in 1°C increments)
Digital Fuel Gauge	5 bars, reserve lamp activates at 1 bar
RPM Range	Analog display up to 10,000 or 15,000 RPM (variable)
Backlight Colors	8 selectable colors (red, orange, yellow, green, blue, light blue, purple, white)

Feature	Detail
Thread Type (for sensor)	M5x0.8
Number of Items	1

WARRANTY INFORMATION

Important Notice:

In the event of a defect and a return request, the manufacturer requires proof of professional installation by a qualified workshop. This is due to previous instances of returns caused by faulty installation. Please ensure this documentation accompanies any return for defect claims.

Furthermore, the tachometer must not be used in conjunction with an RPM limiter, as this can lead to product damage and void the warranty. The unit must also be operated exclusively with the Koso temperature sensor and a suppressed spark plug (e.g., NGK BR).

SUPPORT

For further assistance, technical inquiries, or if you require additional documentation such as detailed wiring diagrams, please refer to the official Koso website or contact your authorized Koso dealer. When contacting support, please have your product model number (KO-BA511K00) and purchase information readily available.

DISPOSAL INFORMATION



Image: Symbol indicating that electrical devices should not be disposed of with household waste.

In accordance with the Electrical and Electronic Equipment Act, the seller is obligated to inform you of the following:

- Electrical devices must be collected separately from unsorted municipal waste.
- Used batteries and accumulators must be separated from old devices before disposal.
- After use, you can return old devices to the seller or to designated collection points (e.g., municipal collection centers or retailers) free of charge.
- As an end-user, you are responsible for deleting any personal data on the old devices before disposal.
- The crossed-out wheeled bin symbol means the device must not be disposed of with household waste.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question