

# Mantis Infrared Tire Temperature Sensor User Manual



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For closed-course competition use only!

## **Before You Get Started:**

### Important Information About Your Mantis

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Welcome! You are now the proud owner of the Mantis infrared tire temperature sensor by Driven Racing. Carefully follow the instructions in this manual to get the most use out of your Mantis.

1. The Mantis infrared tire temperature sensor is for closed-course competition use **ONLY**.
2. Make sure that your bike uses a 12v battery before connecting the battery leads.
3. Test handlebars after installation and prior to riding. Nothing should limit the movement of the handlebars, any of the controls, or any other component of your bike.

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4. For proper adhesion of the sensor body, thoroughly clean fender surface and use maximum pressure when applying. Allow 1 hour for adhesive to set.
5. Your Mantis is **not** waterproof. It must not be used in wet conditions.
6. When not in use, always store your Mantis in a safe place away from any heat source.
7. Your Mantis is not make or model specific. It can be transferred from bike to bike.
8. Tools needed for installation are 2mm allen wrench and 10mm socket wrench to connect the battery terminals.
9. Driven Racing highly recommends that installation be done by a qualified mechanic.

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# Installation and Programming

## Installation

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1. Remove the Mantis from its packaging and lay it out on a clean surface.



## Parts Included

1. Windshield Display Bracket (1)
  2. Sensor Mount (2)
  3. Glue Adhesive (4)
  4. LCD Unit Display (1)
  5. Zip Ties (4)
  6. Battery Cable (1)
  7. Sensor Cable (2)
  8. Infrared Sensor (2)
2. Use glue adhesive provided to secure sensors to front and rear fenders. (Fig 2)

**Note:** Sensors must be installed at least 4" away from any heat source.



Fig 2

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3. Ensure there is a 1.5"-2.5" gap between tire and sensor face. (Fig 3)



Fig 3

4. Secure Mantis LCD display unit to windshield using bracket and suction cups provided. (Fig 4 )

**Note:** Test handlebars for freedom of movement after installation.

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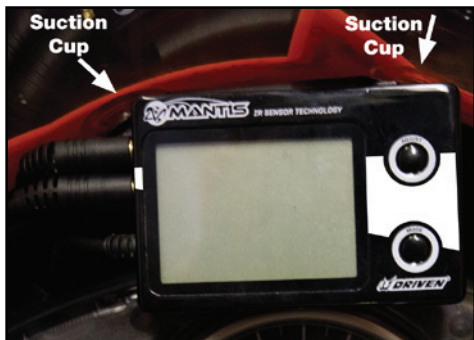


Fig 4

5. Connect power cables to your bike's 12v battery.
6. Run cable from bike battery to Mantis display unit. Connect cable to the display unit.
7. Run sensor cables from front and rear sensors to the display unit. Connect cables to the display unit.
8. Secure cables to bike using zip ties (provided).



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**Note:** For your safety and proper bike operation, cables must be untangled and kept away from direct contact with hot parts (e.g. exhaust and engine case).

9. Turn Mantis LCD display on by pressing and holding the power button at top of unit. Top and bottom readouts should be visible.

## Programming

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To program the LCD display:

1. Locate the “Adjust” and “Mode” buttons next to the display.
2. Press “Mode” button to cycle through high alarm, low alarm, and current temperature display.
3. To set an alarm press the adjust button while current temperature is displayed.
4. The display will now show the high alarms with the selected alarm value

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blinking. By pressing the adjust button you will cycle your selection through the alarms. (High, Low, Front and Rear)

5. To edit an alarm value, select the alarm to be edited then press the “Mode” button. You’re now editing the selected alarm value. Press the “Adjust” button to raise the value or the “Mode” button to lower the value until you reach the desired value.
6. Press and hold either “Mode” or “Adjust” to save and return to the current temperature display.
7. Temperature units can be switched between Celsius and Fahrenheit by pressing (without holding) the power button.
8. Mantis LCD display programming is now complete.

## Replacement Parts and Part Numbers

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Name	Part #
Mantis IR Tire Temperature Sensor - complete assembly	A00003
LCD display unit	100084
Sensor stands	A00008
Front sensor	100085
Rear sensor	100086
Front sensor cable	100088
Rear sensor cable	100089
Battery cable	100091
Display bracket	100077
Display bracket suction cup kit (3 pack)	100090
Glue Adhesive (4 pack)	100092
Zip ties (6 pack)	100093

## Troubleshooting

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<b>Problem</b>	<b>Solutions</b>
Unit does not power on.	Make sure cable is connected securely to battery.  Make sure battery has power.  Make sure battery cable is connected securely to display unit.
LCD display shows lines instead of numbers.	Make sure sensor cables are connected securely to display unit.  Unplug and reconnect cables if necessary.
LCD display numbers are flashing above and below alarm settings.	Reboot display unit by holding power button down for 3 seconds.

## Warranty Information

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Thank you for purchasing a Mantis infrared tire temperature sensor! Driven Racing is pleased to offer this limited warranty.

This warranty is valid for a period of 60 days from date of purchase. All manufacturing defects are covered.

Any and all modifications to the Mantis will void this warranty. Any damage due to faulty installation will void this warranty.

Any Mantis with a manufacturing defect should be returned to Driven Racing. Please call 818-775-0041 to obtain an RA number prior to returning defective product.

All warranty claims must include:

- Driven Racing issued RA number
- Original, paid and dated receipt

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- The complete Mantis (all components must be included)
- The complete name, address and phone number of original purchaser

Please return defective product to:

Driven Racing

c/o Mantis

21143 Itasca Street

Chatsworth, CA 91311

