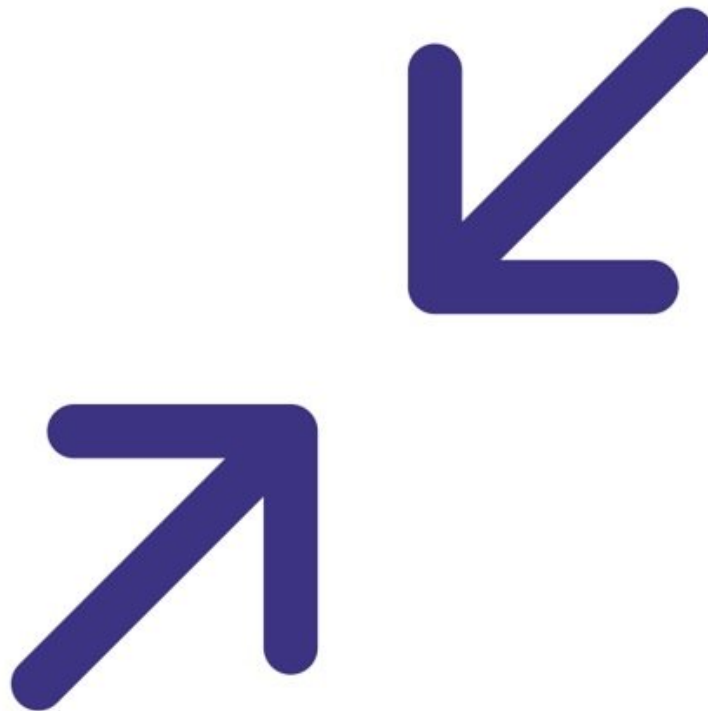




Calibration - PMX zero

How to perform a Zero Calibration with your Aeroqual Ranger | Dust (PMX sensor head).

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INTRODUCTION

Zero calibration allows for the elimination of zero drift that may have occurred after particles have deposited in the optical chamber, or due to changes in temperature and relative humidity.

Aeroqual recommends applying a zero calibration to Ranger | Dust on a regular basis.

[video: <https://www.youtube.com/watch?v=IfcU6-qY2MU>]

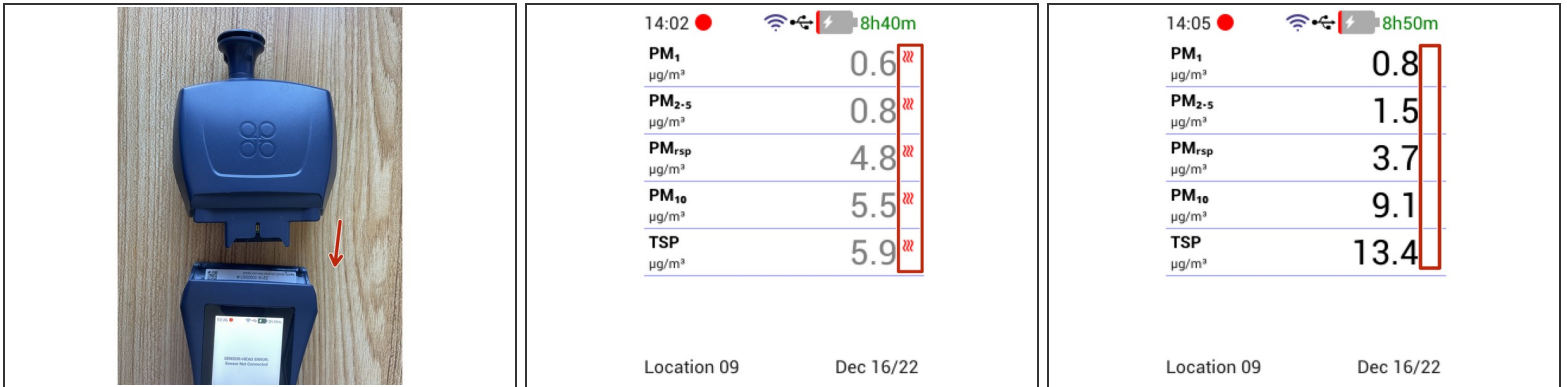


TOOLS:

- [Ranger Dust Zero Calibration Kit](#) (1)

RGR PMX R56

Step 1 — Attach sensor head



- Turn on Ranger
 - Attach the PMX sensor head to the Ranger base
 - Wait for the warmup period to end
- i** The warmup period is indicated by red wavy lines on the main screen

Step 2 — Remove inlet



- Firmly pull out the omni-directional inlet from the PMX sensor head
- Keep the inlet in a safe place

Step 3 — Assemble the zero filter kit







- Open your Ranger Zero Calibration Kit
- Locate the piece of Tygon tubing
- Locate the filter
- Push the Tygon tubing halfway onto the filter on the outlet side, as shown

Step 4 — Attach filter



- Attach the zero-filter kit to the PMX inlet

Step 5 — Stabilize readings

14:01					8h45m
PM₁	0.1				
<small>µg/m³</small>					
PM_{2.5}	0.2				
<small>µg/m³</small>					
PM_{rsp}	0.4				
<small>µg/m³</small>					
PM₁₀	0.6				
<small>µg/m³</small>					
TSP	0.8				
<small>µg/m³</small>					

Location 09

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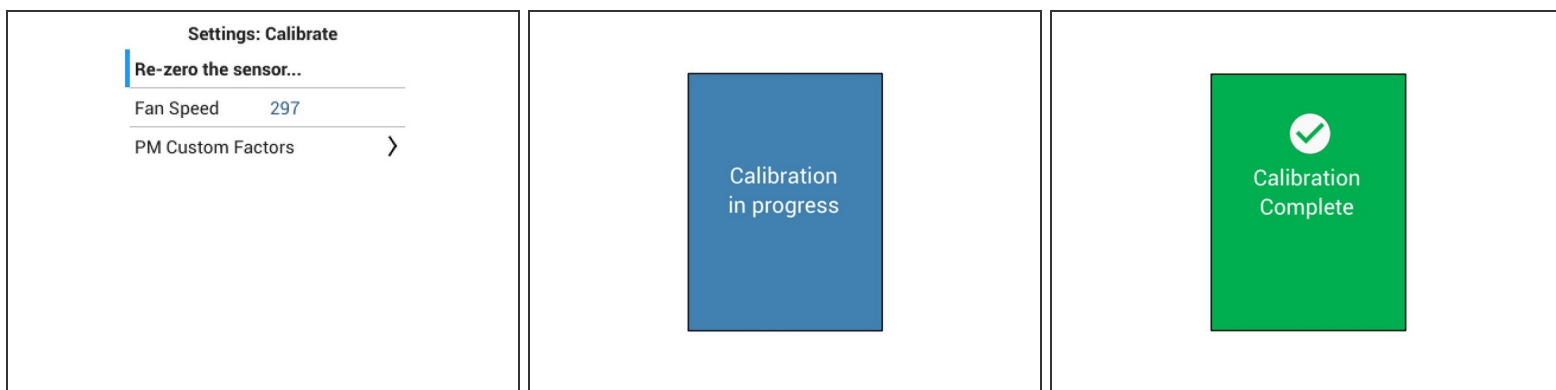
- Flow zero air for 3 minutes for the readings to stabilize
- ⓘ The readings may stabilize but not reach zero values. This is normal.

Step 6 — Enter the settings menu

Settings		
Sensors	All Healthy	
Logging	On	>
Wi-Fi		>
AQI	On	>
Units		>
Alarms	Off	>
Calibrate		>
System		>
Language	English	

- Press and hold the LEFT ARROW to enter the Settings menu

Step 7 — Re-zero the sensor



- Navigate to Settings > Calibrate
- Select 'Re-zero the sensor...'
- Press OK to confirm.
- Please wait for the 'Preparing for calibration' and 'Calibration in progress' screens.
- Upon successful calibration, the instrument will display a 'Calibration Complete' screen.

Step 8 — Replace inlet



- Exit the Settings menu by pressing and holding the LEFT ARROW
- Remove the zero filter from the PMX sensor head
- Firmly press the omni-directional inlet back into the PMX sensor head to reattach it
- Hear it "click"

For further support, contact Aeroqual Support.