Checking Out Your Meter

Performing a pre-operational check is required

✓ Battery
✓ Background
✓ Calibration
✓ Check source
Preoperational Checks of Survey Meters

Step 1 - Battery Check

#1: Turn the knob to the ‘Bat’ position

#2: Make sure the needle is within the ‘Bat Test’ region.

If necessary, replace the batteries with two D cell batteries.
100 cpm on the X0.1 scale
1000 cpm on the x1 scale
10,000 cpm on the x10 scale
100,000 cpm on the x100 scale
Preoperational Checks of Survey Meters

Step 2 - Background Check

The purpose of the background check is to make sure the detector is not contaminated.

#2: With a G-M detector, background should not exceed 100 cpm

Notify EHS if the detector is contaminated.

#1: Turn the knob to the lowest scale (X0.1 scale)
<table>
<thead>
<tr>
<th>Calibration</th>
<th>Check source</th>
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</table>

- **Meter:** Ludlum Model 3  
  - **S/N:** 55555  
  - **Cal Date:** 4/21/05  
  - **Cal Due:** 4/2006  
- **Probe Info:** 44-9  
  - **Probe S/N:** 000001  
- **Check Source Reading:** 2800 cpm  
- **Background Reading:** 50 cpm  
- **Lab Group:** Prof. Broach  
- **Location of Use:** 303 Lewis Thomas Lab
Preoperational Checks of Survey Meters

Step 3 – Calibration Check

Review the Calibration and Calibration Due dates on the calibration label to make sure the meter is still in calibration.
The correct procedure starts with determining what the expected check source reading should be.
Preoperational Checks of Survey Meters

Step 4 - Checking the Source Response

Place the detector so that it touches the source. The meter reading should be within ± 20% of the expected check source reading.

The detector is in close contact with the source, i.e., actually touching the source.