

Checking Out Your Meter

Performing a pre-operational check is required

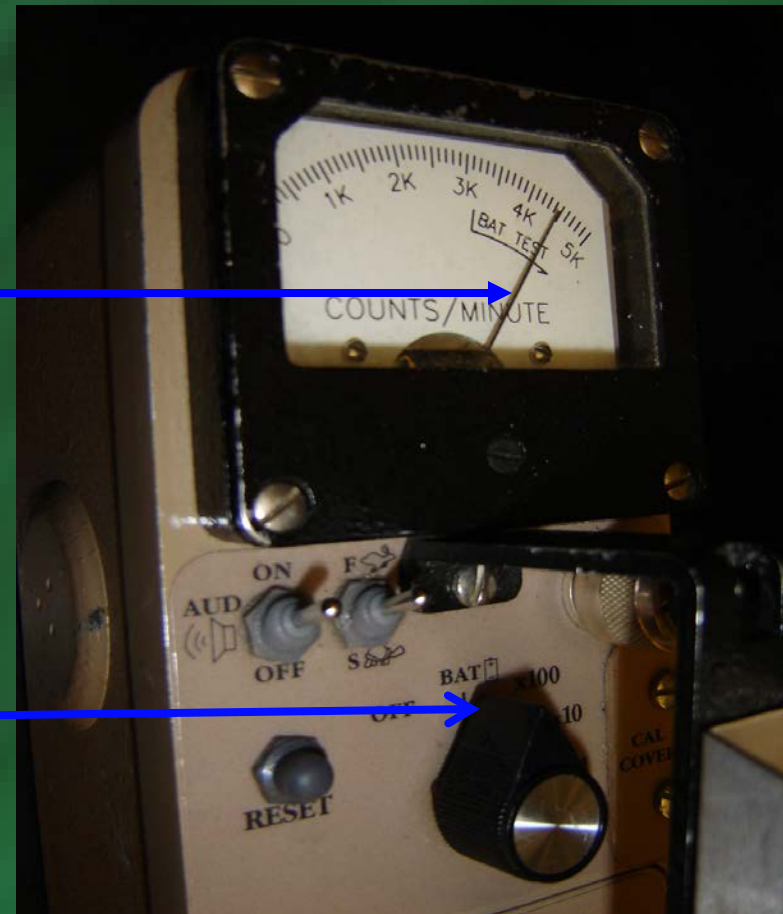
- ✓ **B**attery
- ✓ **B**ackground
- ✓ **C**alibration
- ✓ **C**heck source

Preoperational Checks of Survey Meters

Step 1 - Battery Check

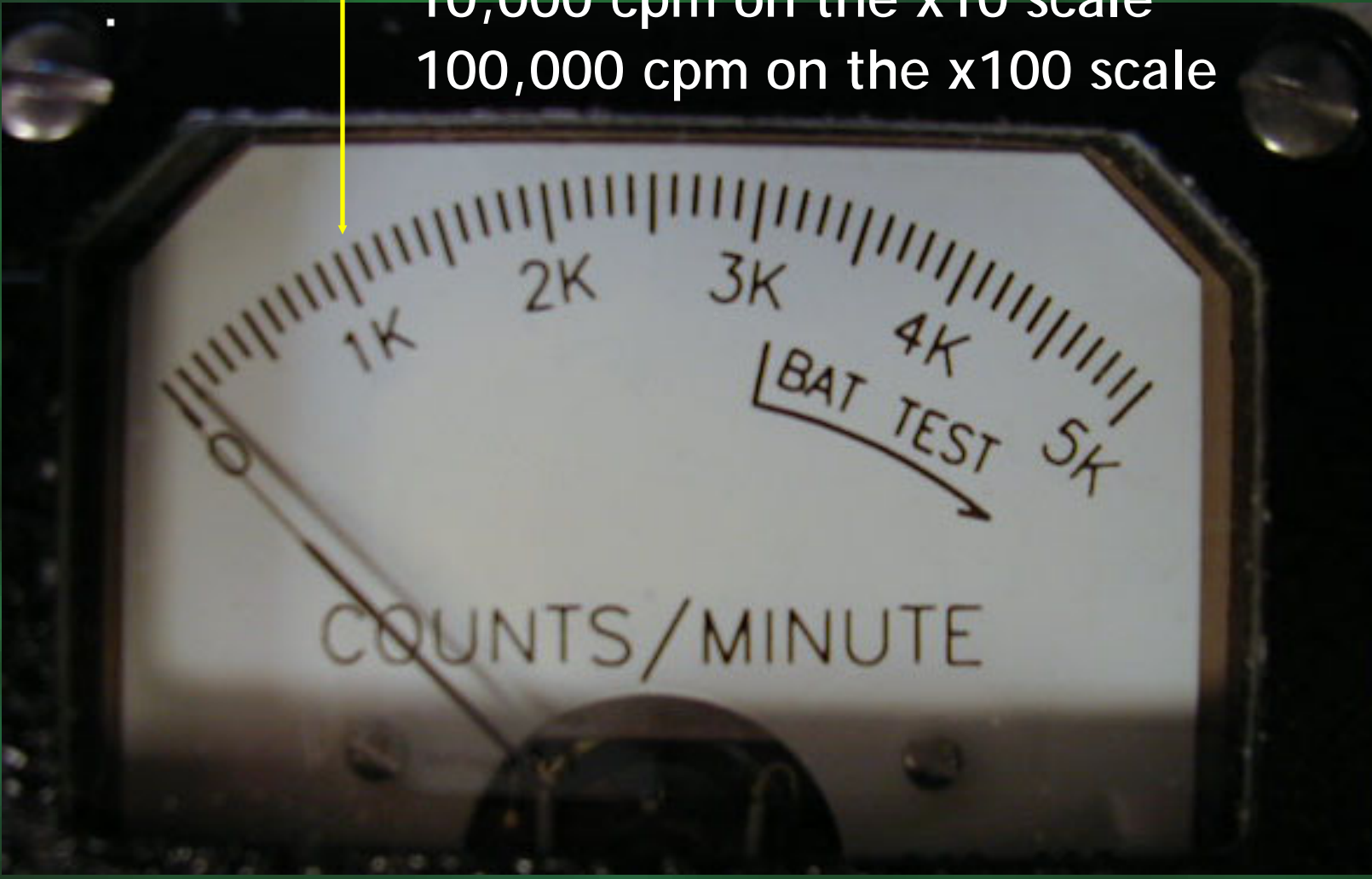
#2: Make sure the needle is within the 'Bat Test' region.

#1: Turn the knob to the 'Bat' position



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



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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)

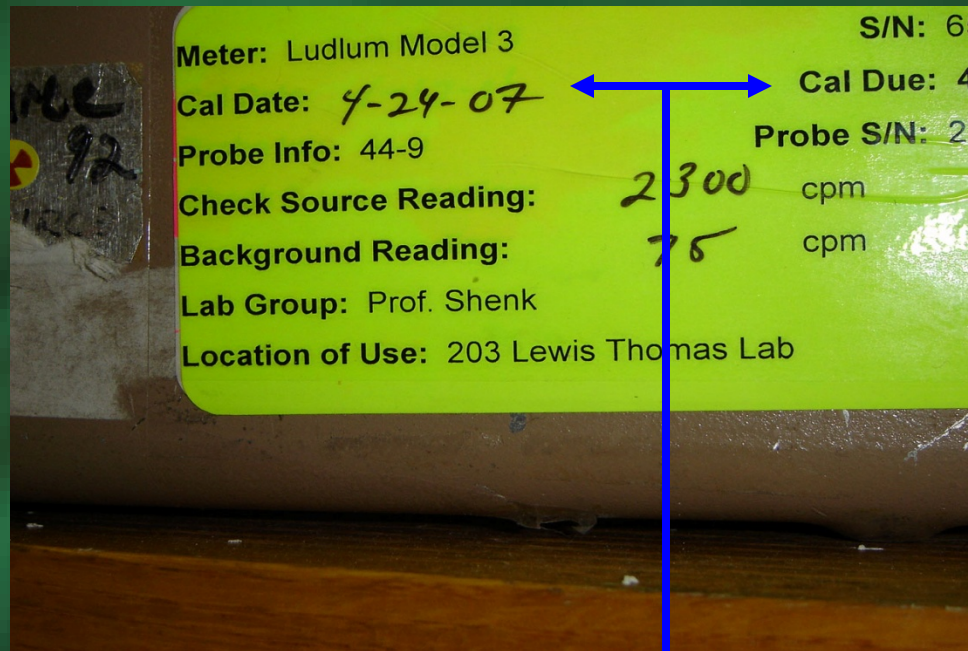
- Calibration
- Check source

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

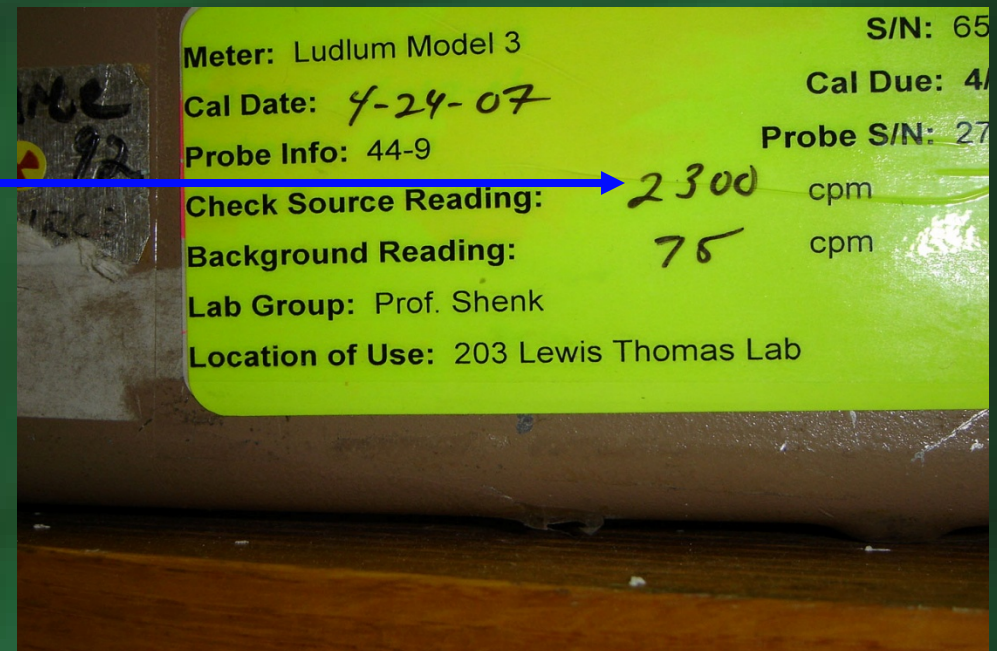


Review the Calibration and Calibration Due dates on the calibration label to make sure the meter is still in calibration

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Step 4 – Source Check

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 $\pm 20\%$ of the expected check source reading.



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