

Please read through this owners manual carefully before using your new tool. Use your tool properly and only for its intended use.

## Fowler mini-MAG Protractor

The Fowler Mini-Mag protractor is a precision instrument used for measuring angles in which any of its four surfaces may be utilized.

- Zero can also be set at any angle so that the relative angle between two surfaces can be measured.
- The Mini-Mag protractor can also be set to read "level" zero, so it may be used as a leveling device.
- The Hold feature freezes the displayed reading while retaining the original zero datum. Simply press once to Hold and once more to return to measuring mode.
- Magnets embedded on both sides and bottom (35 lb. pull).

### Operation

1. To read absolute measurements, simply push the OFF/ON/LEVEL button and the actual angle is displayed. The calibration procedure for absolute zero is a simple procedure and instructions appear on the back of this page.
2. To read relative zero, turn the unit on, place the level on your reference surface and press the ZERO button, "Level" will disappear from the upper left-hand corner of the readout and set the display to zero. Move the unit to the second surface, and it will read the angle directly to an accuracy of  $\pm 0.2$  degrees. It does not matter if either of the surfaces is truly level. The Mini-Mag protractor will accurately register the angle between them. By pushing the on/off/level button twice the unit will return to level mode.
3. For accurate readings, you should always keep the Mini-Mag protractor upright and not leaning toward or away from you. The Mini-Mag protractor uses a standard 9 volt battery which can be easily replaced by removing the back plate with the included screwdriver.
4. Low battery indicator will be displayed when it is time to replace the battery.

### Specifications

Resolution:	0.05°
Repeatability:	0.05°
Accuracy:	$\pm 0.2^\circ$
Battery:	standard 9 volt (approximately 250 hours of use)



# Calibrating the Fowler Mini-Mag Protractor



**1.** Place the level on a flat surface.



**2.** Press and hold ZERO and OFF/ON/LEVEL buttons for 5 seconds or until CAD1 appears.



**3.** Do not disturb the level until the "1" flashes. When this occurs press "zero" briefly.



**4.** When CAD 2 appears rotate the unit 90 degrees clockwise. Wait for "2" to flash then press "zero" briefly.



**5.** When CAD 3 appears rotate the unit another 90 degrees clockwise. Wait for "3" to flash then press "zero" briefly.



**6.** When CAD 4 appears rotate the unit another 90 degrees clockwise. Wait for "4" to flash then press "zero" briefly.



**7.** When CAD 5 appears rotate the unit another 90 degrees clockwise. When the final reading is taken the unit will reset automatically.



**8.** Your Fowler Mini-Mag protractor is now ready to use.