

# AngleStar® Digital Protractor

## Model DP-45

The AngleStar® Digital Protractor Model DP-45 provides instant digital display of level, angle and tilt. Consists of a rugged electronic sensor, custom circuitry and liquid crystal display in an easy-to-use, hand held battery powered package. Features include alternate reference and display hold. Digital display eliminates the need to interpret a bubble or vernier scale.

### Features

- ❑ Reads in degrees
- ❑ Alternate reference (floating zero)
- ❑ Display hold
- ❑ High impact plastic carrying case

### Applications

- ❑ Driveshaft maintenance
- ❑ Antenna positioning
- ❑ Race cars
- ❑ Machine tooling

1. **ON/OFF** The instrument is powered by a single push of the ON/OFF button. Power is removed by a second push of the same button or after a 10 minute time out period.
2. **HOLD** The display reading on the LCD is retained and flashes when the HOLD button is depressed. Push again to release hold feature.
3. **ALT REF (Floating Zero)** Alternate reference allows you to zero the digital readout anywhere within its range for a quick and accurate measurement of deviations from a reference surface.
4. **LO BAT** LO BAT is displayed on the LCD when the battery voltage drops below 7 volts. The battery should be replaced when this condition exits. Low battery voltage may affect accuracy.
5. **MINUS SIGN** The minus sign (-) indicates an angle in the counterclockwise direction from zero. Absence of the minus sign indicates an angle clockwise from zero.
6. **OVER RANGE** When the instrument is used at an angle that exceeds its measurement range ( $\pm 55^\circ$  from level, null) no angular reading will appear on the LCD and OVER RANGE will flash.
7. **ALT REF** Depressing the ALT REF button will zero the display reading to a new reference and "ALT REF" will be displayed on the LCD. A second push of the ALT REF will return the instrument to normal, or gravity referenced mode.



### Performance Specifications

<b>Range</b> .....	$\pm 45^\circ$
<b>Resolution</b> .....	$\pm 0.1^\circ$
<b>Linearity</b> .....	$\pm 0.1^\circ$ ( $0^\circ$ to $10^\circ$ )
	1.5% of reading ( $10^\circ$ to $45^\circ$ )
<b>Repeatability</b> .....	$\pm 0.1^\circ$
<b>Cross Axis Error</b> .....	<1% up to $45^\circ$ cross axis angle
<b>Voltage Supply</b> .....	9 volt battery
<b>Battery Life</b> .....	100 hours approx.
<b>Temperature Range</b>	
<b>Operating</b> .....	$0^\circ$ to $65^\circ\text{C}$
<b>Storage</b> .....	$-40^\circ$ to $65^\circ\text{C}$
<b>Weight</b> .....	12.3 oz (349 gms)

### Dimensions in (mm)

