# AngleStar® Digital Protractor <br> Model DP－45 

## DESCRIPTION

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 referenceand display hold．Digital display eliminates the need to interpret a bubble or vernier scale．

## FEATURES

$\downarrow$ Reads in Degrees
－Alternate Reference
（Floating Zero）
$\checkmark$ Display Hold
$\checkmark$ High Impact Plastic
Carrying Case

## APPLICATIONS

－Driveshaft Maintenance
－Antenna Positioning
－Race Cars
$\downarrow$ 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 |  |
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| Range | $\pm 45^{\circ}$ |
| Resolution | $\pm 0.1^{\circ}$ |
| Linearity | $\pm 0.1^{\circ}\left(0^{\circ}\right.$ to $\left.10^{\circ}\right)$ |
|  | $1.5^{\circ} \%$ of reading $\left(10^{\circ}\right.$ to $\left.45^{\circ}\right)$ |
| Repeatability | $\pm 0.1^{\circ}$ |
| Cross Axis Error | $<1 \%$ up to $45^{\circ}$ cross axis angle |
| Voltage Supply | 9 volt battery |
| Battery Life | 100 hours approx． |
| Temperature Range | $0^{\circ}$ to $65^{\circ} \mathrm{C}$ |
| Operating | $-40^{\circ}$ to $65^{\circ} \mathrm{C}$ |
| Storage | 12.3 oz $(349 \mathrm{gms})$ |
| Weight |  |




