

# Spectra Precision DET-2 Electronic Theodolite

## Applications

- Establishing 90 degree reference lines
- Checking angles, alignment, and plumb
- Anchor bolt alignment
- Gravity flow pipe laser setup
- Steel column placement
- Alignment of forms, tilt-up walls, and curtain walls
- Basic grade work
- Short range leveling



## Full Featured Angle Measuring Digital Electronic Theodolite



The Spectra Precision® DET-2 is a rugged, cost-effective theodolite designed to give accurate angle measurements in general construction applications. The affordable, versatile, easy-to-use instrument will increase your productivity when turning angles and setting elevations and lines.



### Key Features and Benefits

- 2 arc seconds angular accuracy - accurate enough for any construction job, yet the display resolution can be tailored to any operator's preferences for fast readings
- Vertical axis compensation - tilt sensor provides the highest level of accuracy and can be turned on or off depending on job requirements
- Dual LCD with large characters - easy to see angle readings eliminate errors and reduces eye fatigue
- Simple six button keypad - quick setups and simple operation with low operator learning curve
- Large suite of programmable settings - provide multiple options for various users and job requirements including zero position of vertical angle
- Measurement units in degrees, gon, or mils
- 90 degree angle audible notification - for quick turning and set out of right angles
- Instant conversion of vertical angles to percent of grade - convenient for slope work and when used in conjunction with Dialgrade® pipe work
- An optical plummet allows quick setup over a control point
- NiMH rechargeable battery pack and charger - lower operating cost with reusable batteries
- Alkaline battery pack standard - provides backup and eliminates downtime if the charge is lost in the middle of a job
- Battery strength is indicated on the LCD's for efficient planning. An automatic shut-off can be selected for higher battery efficiency.



# DET-2 Electronic Theodolite - Accurate, Affordable, and Easy To Use

## DET-2 SPECIFICATIONS

### Telescope

- Image: Erect
- Magnification: 30x
- Aperture: 45 mm (1.7 in)
- Focus Distance: 1.35 m to  $\infty$  (4.43 ft) to  $\infty$
- Field of View: 1° 30'
- Stadia Ratio / Constant: 100 / 0

### Optical Plummet

- Image: Erect
- Magnification: 3X
- Angle of view: 5°
- Focusing range: 0.5 m ~  $\infty$  (1.6 ft ~  $\infty$ )
- Reticle type: Crosshair

### Angle Measuring System

- Minimum Reading: 1" or 5"
- Precision: 2"
- Units: Deg / mil / gon / V %
- Display: Dual, Large Character, Backlit LCD

### Tilt Sensor

- Automatic Compensation:  $\pm 3'$  Range
- User set On/Off

### Vials

- Tubular: 30"/2 mm
- Circular: 8"/2 mm

### One Touch Button Functions

- ON / OFF: Power
- ☀: Backlight / Illumination On / Off
- HOLD: Angle Hold
- R/L: Clockwise/Counterclockwise Measurement
- OSET: Zero Reset of Horizontal Angle
- V%: Convert Vertical Degrees to Percent

### Environmental Characteristics

- Dust/Water: IP-54
- Operating Temperature:  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
( $-4^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ )

### Physical Characteristics

- Size - Instrument: 164 x 154 x 340 mm  
(6.4 x 6.1 x 13.4 in)
- Weight - Instrument: 4.5 kg (9.9 lb)

### Warranty

- 2 Year



A large LCD on both sides of the instrument has big, easy to read characters. A built-in reticle illuminator and LCD back-lighting can be turned on if needed in low light conditions with a single press of a button. A six button keypad provides easy access to the most common functions.



Each DET-2 comes equipped with a plumb bob, NiMH rechargeable battery pack and charger, alkaline battery pack, adjustment tools, rain hood, multi-language user guide, and hard-shell, compact, o-ring sealed, carrying case

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