

**PENTAX**

## **ETH-500 Series Electronic Theodolites**

FOR BUILDING AND CONSTRUCTION

ETH-502 | ETH-505 | ETH-510 | ETH-520

### **QUICK! CLEAR! EASY!**

- Compact and portable electronic theodolites with Easy-to-Read display.
- Built for the construction site

### **BUILDING THE FUTURE**

There are 4 models in the range providing a choice of 2" (ETH-502), 5" (ETH-505), 10" (ETH-510) or 20" (ETH-520) accuracy.



## STANDARD CONFIGURATION

- 2x Battery case (one is attached to each instrument)
- 4x Dry cell battery, type AA (pre-installed in battery case)
- A set of tools
- 1x Plumb bob
- 1x Carrying case
- Instruction manual



## APPLICATIONS

- Setting out right angles and checking plumb
- Alignment measurements
- Anchor bolt layout
- 90° layout

## KEY FEATURES INCLUDE

- Easy to read-display
- Zero set and reverse angle display
- Powered by Alkaline batteries

## EASY TO READ-DISPLAY

A large display (LCD) is incorporated on both sides of the instrument. Both vertical and horizontal angles are displayed in degrees or gon.

## EASY KEY OPERATION

A row of soft keys allows simple and fast operation.

## EASY TO USE

- Lightweight and compact
- The basic instrument weighs only 4.5 kg

## AUTOMATIC POWER-OFF FUNCTION

Automatic power-off prevents unnecessary battery drainage. The remaining battery capacity is indicated on the display.

## ANGLE MEASUREMENT AND ANGLE CONTROL

- Clockwise and counter-clockwise angle measurement
- Conversion of the vertical angle to a percentage grade
- Zero setting of the horizontal angle at any position
- Horizontal angle 'Hold key function

## BRIGHT OPTICS

All the models have a bright 30x magnification telescope which ensures sharp and clear images even in poor light conditions.

## ELECTRONIC THEODOLITES ETH-500 SERIES SPECIFICATIONS

Model		ETH-502	ETH-505	ETH-510	ETH-520
Telescope	Imaging			Erect image	
	Objective aperture			45 mm	
	Magnification			30 x	
	Resolution			≤ 3"	
	Field of view			1° 20'	
	Shortest focusing distance			1.35 m	
	Stadia multiplication constant			100	
	Stadia addition constant			0	
Angle measurement	Angle measuring mode			Absolute encoder	
	Angle measuring accuracy	2"	5"	10"	20"
	Angle display		1°/5"	5°/10"	10°/20"
	Angle unit			360°/400G	
Compensator	Tilt sensor			Automatic vertical compensation	
	Tilt compensator	Yes	Yes	No	No
	Soft switch	ON/OFF	ON/OFF	-	-
	Compensation range			± 3'	
Display unit				Two-sided	
Optical plummet	Image			Erect	
	Magnification			3 x	
	Angle of vision			3°	
	Focusing range			0.5 m ~ ∞	
	Sensitivity of tubular vial	30"/2 mm			40"/2 mm
	Sensitivity of circular vial		8"/2 mm		
Dust & Water Protection				IP44	
Type of base				Detachable	
Power supply	Battery			4 x single three (AAA) type dry battery	
Ambient temperature	For operation			-20°C - +50°C	
Weight	Instrument			4.5 kg	
	Carrying case			1.9 kg	
Measurements	Instrument			W 175 mm x L 170 mm x H 334 mm	
	Carrying case			W 330 mm x L 450 mm x H 220 mm	

Specifications are subject to change without notice

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The CE marking assures that this product complies with the requirements of the EC directive for safety.



Member symbol of the Japan Surveying Instruments Manufacturers' Association representing the high quality surveying products.