

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.

ISO 9001: 2015 Certified

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Japan Surveying Instruments Manufacturers' Association

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