

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 designed for face-off use 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	Inaging	Erect image			
	Objective aperture	45 mm			
	Magnification	30x			
	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'	
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	3x			
	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 two (AA) 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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