PENTAX ETH-500 Series Electronic Theodolites

FOR BUILDING AND CONSTRUCTION ETH-502 | ETH-505 | ETH-510 | ETH-520



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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