

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.



ETH-500 Series Electronic Theodolites

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"
Compensator	Angle unit			360°/400G	
	Tilt sensor			Automatic vertical compensation	
	Tilt compensator	Yes	Yes	No	No
	Soft switch	ON/OFF	ON/OFF	-	-
Display unit	Compensation range			± 3'	
				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	