



Automatic Level

AL Series AL-240 / AL-240R / AL-270 /
AL-270R / AL-320 / AL-320R / AL-320S
High Performance

IPX6: For Use under the Harshest Conditions

The instrument is waterproof:
protection class **IPX6**.

A gas-filled objective lens
compartment prevents moisture
condensation on the lenses.

Automatic Compensator

This newly-developed automatic
compensator is wire suspended
and magnetically damped.



The Pentax Automatic
Level AL
is impressively
equipped and
applicable in surveying
and construction



PENTAX®
Ahead of Vision



Pentax AL Series Levels are Robust Precision instruments for Surveying and Construction

High Performance for a Wide Range of Applications

The AL-series automatic levels are accurate and easy to use. They feature improved performance and are compact and light.

Short focus distance

The AL-240 and AL-270 provide an extremely short focus distance of 12 inch (30 cm), allowing usage in confined space.

Quality 'Designed by Pentax'

- ▣ Superior optics in terms of sharpness, contrast and range.
- ▣ High Resolution Telescope: bright images and high resolving power enable clear targetting.
- ▣ Compact, Watertight IPX6 and Robust (only high-grade materials are used).

Useful accessories

The AL-series Levels offer a wide variety of optional accessories to match different job conditions.

▣ Parallel Plate Micrometer (SM4)

Parallel Plate micrometer SM4 attached to the front of the telescope provides reading down to 0.1mm.

▣ Diagonal eyepieces (SBL2)

The diagonal eyepiece SBL2 can be used when space is limited or when the instrument is set up at low level.

▣ Illumination device (EP2)

The illumination device EP2, attached to the front of the telescope, provides light to the telescope reticle, allowing operation at night or when working in dark places like a tunnel.

Technical specifications

AL-Series	AL-240	AL-240R	AL-270	AL-270R	AL-320	AL-320R	AL-320S
Telescope							
Image	Erect						
Magnification	24 x		27 x				32 x
Objective aperture	36 mm		40 mm				45 mm
Resolving power	3.5"		3"				2.5"
Field of view	2.5 % (1°26')				2.3 % (1°20')		
Minimum focus distance	0.3 m/12"				0.5 m/20"		
Stadia ratio	1:100						
Stadia constant	0						
Automatic compensator							
Compensation range	± 12'						
Setting accuracy	± 0.5"				± 0.3"		
Standard deviation*	± 2.0 mm		± 1.5 mm		± 0.8 mm		
(1 km double run levelling) **	-		-		± 0.4 mm		

AL-Series	AL-240	AL-240R	AL-270	AL-270R	AL-320	AL-320R	AL-320S
Sensitivity of vial							
Circular vial	8' / 2 mm						
Horizontal circle	Metal						Glass
Diameter	96 mm						88 mm
Graduation	1°/1G(360° or 400G)						10°/10c
Estimation	0.1°/0.1G						1°/1c
Levelling base	3 screws	Spherical	3 screws	Spherical	3 screws	Spherical	3 screws
Dimensions and weights							
Length	219 mm				247 mm		
Width	147 mm						
Height	133 mm	137 mm	133 mm	137 mm	137 mm	141 mm	137 mm
Weight (kg/lbs)	1.6/3.5	1.8/3.9	1.6/3.5	1.8/3.9	1.8/3.9	2.0/4.4	2.0/4.4
Carrying case (mm)	L364 x W200 x H180 mm						

Remarks: * Standard deviation measured without the parallel plate micrometer

** Standard deviation measured with the parallel plate micrometer



Standard configuration

- ▣ Instrument
- ▣ Objective cap
- ▣ Plumb bob
- ▣ Hexagonal wrench
- ▣ Lens brush
- ▣ Rain cover
- ▣ Instruction manual
- ▣ Carrying case



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