



# **Automatic Level**

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

# **High Performance**



# 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 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 low.

#### □ 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**

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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	1.5 mm ± 0.8 mr		± 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							
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							



# **Standard configuration**

- Instrument
- Objective cap
- □ Plumb bob
- ☐ Hexagonal wrench
- Lens brush
- □ Rain cover
- Silicon cloth
- Instruction manual
- Carrying case





