# **Automatic Level**

AL Series AL-241 | AL-271 | AL-321 High Performance



## **Pentax AL Series Levels**

#### 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-241 and AL-271 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).

#### **Technical specifications**

AL-Series	AL-241	AL-271	AL-321
Telescope			
lmage	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	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

#### **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 0.1 mm.

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.



AL-Series	AL-241	AL-271	AL-321
Sensitivity of vial			
Circular vial		8'/ 2 mm	
Horizontal circle		Metal	
Diameter		96 mm	
Graduation	1°/1G(360° or 400G)		
Estimation	0.1°/ 0.1G		
Levelling base		3 screws	
Dimensions and weights			
Length	219 mm		247 mm
Width	147 mm		
Height	133 mm		137 mm
Weight (kg/lbs)	1.6/3.5		1.8/3.9
Carrying case (mm)	L364 x W200 x H180 mm		

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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#### Ahead of Vision

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