

**SOKKIA**



# LP30A·LP31A

Leveling Lasers

***More accurate, easier to handle  
A new standard for the leveling tools.***



# ***LP30A-LP31A increase leveling productivity both indoors and outdoors.***

***Whether indoor or outdoor, the LP30A and LP31A meet the needs of a wide range of leveling applications in construction, civil engineering and interior finishing work. With brushed up accuracy and extended battery life, working efficiency has been even further enhanced.***

## ***Two models to fit your needs***

The LP30A is a high-grade model offering the highest accuracy in its class and a wide measuring range. For less demanding measuring situations, the highly dependable LP31A offers similar performance at a lower price.

	LP30A	LP31A
Accuracy	7 arc seconds (1mm at 30m / 0.04 in. at 100 ft.)	10 arc seconds (1.5mm at 30m / 0.06 in. at 100 ft.)
Range	300m (1000 ft.) radius 600m (2000 ft.) diameter	120m (400 ft.) radius 240m (800 ft.) diameter

## ***Dependable compensator ensures accuracy***

Both the LP30A and LP31A employ Sokkia's precision pendulum compensator to ensure horizontal accuracy. This compensator is activated by gravity and is unaffected by temperature variations. Accurate measurement is therefore possible in a variety of measuring environments. The air damping system ensures laser beam stability even in locations subject to vibration. The reliability and durability of this compensator system has been proven at job sites all over the world.

## ***Simple operation***

Simply place the LP30A/31A on a tripod or level arm, and set it approximately level. The built-in compensator then automatically sets the horizontal plane and the laser rotor starts revolving immediately. If the unit is tilted or jarred beyond its self-leveling range, the rotation and laser beam stop automatically and a warning lamp flashes.

## ***Rugged design to withstand the rigors of construction sites***

The LP30A and LP31A are highly water-resistant units protected from splash water from any direction in compliance with IPX4 (IEC60529). If caught in a sudden shower, just wipe off the water. The rotor assembly is fully enclosed in a reinforced glass housing protecting it from water and dust.

## ***Three power packages***

The LP30A/31A can be powered by four D (R20) size batteries or a rechargeable Ni-Cd battery. Both models operate for 90 hours with alkaline batteries and 40 hours with Ni-Cd battery BDC39A. The optional AC adapter EDC79 (plus adapter EDC74) enables use with AC power (100V to 240V).







#### Stadium

Leveling work on outdoor construction sites. Teamwork is possible using multiple detectors.



#### Drainage

When used with a leveling rod, it's easy to measure the height difference of runoff ditches, sewage pipes and drains.



#### Floor

For floor leveling.



#### Ceiling

A level arm facilitates one man leveling operations at elevated positions.



#### Wall

Simplifies interior work. Using an elevating tripod, the height of the unit can be easily adjusted.



#### Convenient all-in-one carrying case

In addition to the standard accessories, extra detectors and rod clamp, spare battery and other small items can be carried in the standard carrying case.

## Easy-to-handle Compact Detector LR100

**Advanced functions  
packaged in a rugged  
compact body which fits  
nicely into your palm.**



#### - Dual displays

LR100 has displays on both front and reverse faces.

#### - Auto illumination

The LCD displays are automatically illuminated when the laser beam is detected. This function enables you to save battery power when working in low-light conditions.

#### - Three buzzer settings

The buzzer volume can be set to "Loud", "Quiet" or "Off".

#### - Bubble tube is equipped as standard for precision leveling.

#### - Waterproof structure

The LR100 is fully protected from water penetration in compliance with IPX7 (IEC60529) enabling it to be handled with wet hands.

#### - Protector LRP1

Optional rubber protector LRP1 protects the LR100 from hard shocks.

#### - 100 hours continuous use

With two alkaline batteries, the LR100 operates continuously for approx. 100 hours. The AA (R6) size Ni-MH rechargeable batteries power it for approx. 75 hours. To save the battery, the power is turned off automatically if the unit does not receive the laser beam for 10 minutes.

#### - Two sensitivity settings for all measuring needs

Two sensitivity settings are available. Setting 1 is for short range precision measurement while Setting 2 is for general purpose measurement.

	Sensitivity	settings
Key selection	Setting No. 1	Setting No. 2
Hi	$\pm 0.8\text{mm}$ ( $\pm 0.03\text{in.}$ )	$\pm 2.5\text{mm}$ ( $\pm 0.1\text{in.}$ )
Low	$\pm 2.5\text{mm}$ ( $\pm 0.1\text{in.}$ )	$\pm 4.3\text{mm}$ ( $\pm 0.17\text{in.}$ )



Detector LR100



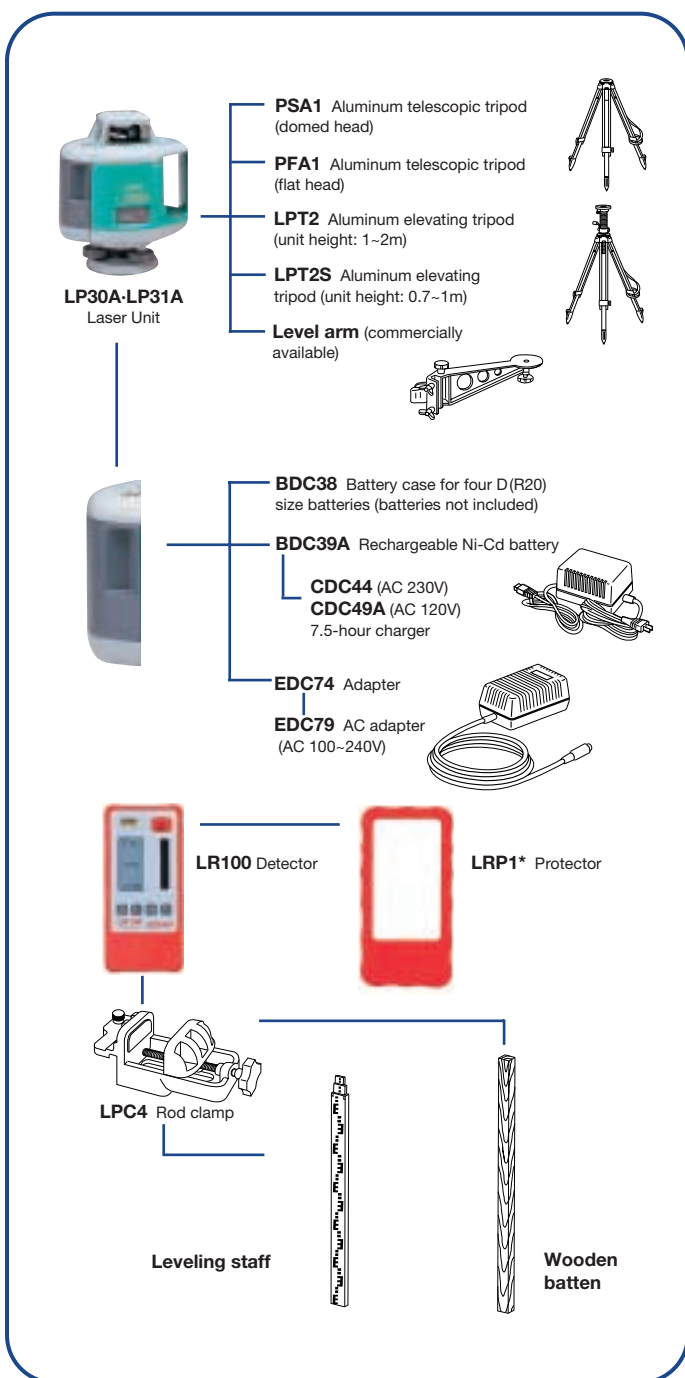
Display on reverse face



Fitted with Protector LRP1



## LP30A-LP31A Leveling Laser System



## Specifications

Leveling Lasers	LP30A	LP31A
Horizontal accuracy	7 arc seconds (1mm/30m, 3.4mm/100m) (0.04 in./100 ft., 0.13 in./300 ft.)	10 arc seconds (1.5mm/30m, 5mm/100m) (0.06 in./100 ft., 0.2 in./300 ft.)
Typical measuring range*	radius 300m (1,000 ft.) diameter 600m (2,000 ft.)	120m (400 ft.) 240m (800 ft.)
Beam diameter	15mm dia. (at projection point)	
Rotation speed	600rpm	
Light source	Laser diode, 785nm wavelength	
Laser class	Class 1 (IEC 60825-1 am.2), Class I (FDA)	
Compensator	Pendulum compensator with air damper	
Compensation range	±10'	
Sensitivity of circular level	10'/2mm	
Warning display	Out of compensation range, Low battery, Rotor malfunctioning	
Base	5/8in. setting screw	
Water resistance	Conforms to IPX4 (IEC60529) splash protection	
Operating temperature	-10°C to +50°C (14° F to 122° F)	
Dimensions	W194 x D150 x H232 mm (W7.6 x D5.9 x H9.1 in.)	
Weight	2.5kg (5.5lbs), including batteries	
Power supply	Four D (R20) size batteries or Ni-Cd rechargeable battery	
Operating duration at 25°C (77°F)	90 hours with alkaline batteries 40 hours with Ni-Cd rechargeable battery BDC39A	
AC adapter EDC79 with EDC74 (optional)	AC100V to 240V input voltage	

\* Actual measuring range depends on local environmental conditions.

Detector	LR100
Display	LCD with illumination, on both faces
Detection sensitivity	Setting 1 H: ±0.8mm, L: ±2.5mm Setting 2 H: ±2.5mm, L: ±4.3mm
Buzzer	Loud/Quiet/Off selectable
Auto illumination	Displays are automatically illuminated when laser beam is detected.
Sensitivity of level	1° / 2mm
Water resistance	Conforms to IPX7 (IEC60529)
Operating temperature	-10°C to 50°C (14°F to 122°F)
Dimensions	W65 x D25 x H140 mm (W2.6 x D1.0 x H5.5 in.)
Weight	Approx. 200g (7.1 oz.), including batteries
Power supply	Two AA (R6) size batteries (D-cell, Ni-MH or Ni-Cd)
Operating duration at 25°C (77°F)	Alkaline: Approx. 100 hours Ni-MH (1,900mAh) : Approx. 75 hours Ni-Cd (1,000mAh) : Approx. 40 hours
Auto power cut-off	10 minutes after operation

Designs and specifications are subject to change without notice.



Laser beam is invisible to the naked eye.



**SOKKIA CO.,LTD.**

ISO9001 Certified (JQA-0557)

<http://www.sokkia.co.jp/english/>

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