

SOKKIA™

LP30•LP31

Level Planer

*General-Purpose Level Planers
Featuring the New LR100 Detector*

IEC529
IPX4

LP30, LP31
Instruments

IEC529
IPX7

LR100
Detector



LP30•LP31 increase leveling productivity both indoors and outdoors.

Whether indoor or outdoor, the LP30 and LP31 meet the needs of a wide range of leveling applications in construction, civil engineering and interior finishing work. With the unique LR100 detector, leveling efficiency has been even further enhanced.

Two models to fit your needs

The LP30 is a high-grade planer offering superior accuracy and a wide measuring range. For less demanding measuring situations, the highly dependable LP31 offers similar performance at a lower price.

	LP30	LP31
Accuracy	±10 arc seconds ±1.5mm at 30m (±1/16 in. at 100 ft.)	±15 arc seconds ±2.25mm at 30m (±3/32 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 LP30 and LP31 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 LP30/31 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.

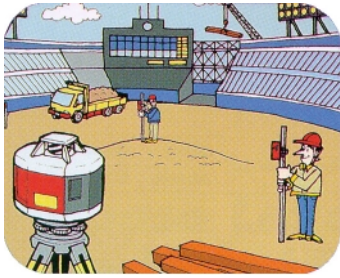
Rugged design to withstand the rigors of construction sites

The LP30 and LP31 are highly water-resistant units protected from splash water from any direction in compliance with IPX4 (IEC529). 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

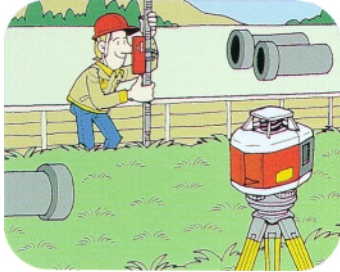
The LP30/31 can be powered by four D(R20) size batteries or a rechargeable Ni-Cd battery. The optional AC adapter EDC79 (plus adapter EDC74) enables use with AC power (100V to 240V).





Stadium

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



Drainage

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



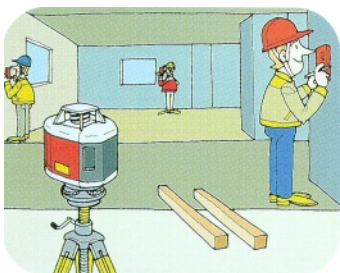
Floor

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.

New 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 new 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 (IEC529) 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-Cd rechargeable batteries power it for approx. 25 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.

Key selection	Sensitivity settings	
	Setting 1	Setting 2
Hi	±0.8mm	±2.5mm
Low	±2.5mm	±4.3mm



Detector LR100



Display on reverse face



Fitted with Protector LRP1

LP30•LP31 Level Planer System Specifications

PSA1 Aluminum telescopic tripod (domed head)

PFA1 Aluminum telescopic tripod flat head

LPT2 Aluminum elevating tripod (unit height: 1m-2m)

LPT2S Aluminum elevating tripod (unit height: 0.7m~1m)

Level arm (commercially available)

BDC38 battery case for four D(R20) size batteries (batteries not included)

BDC39 Rechargeable Ni-Cd battery

CDC44 (AC 230V)

CDC49A (AC 120V) 7.5-hour charger

EDC74 Adapter

EDC79 AC adapter (AC 100V~240V)

LR100 Detector

LRP1* Protector
**When using the LR100 detector with its protector LRP1, an optional adapter LRA1 is required for attachment to the LPC3 rod clamp.*

LPC3 Rod Clamp

Leveling staff

Wooden batten

Level planers	LP30	LP31
Laser class	Class 1 (IEC 825-1), Class 1 (CFR 21)	
Light source	Laser diode, 785nm wavelength	
Beam diameter	15mm dia. (at projection point)	
Rotation speed	600rpm	
Typical measuring range*radius	300m (1,000 ft.)	120m (400 ft.)
diameter	600m (2,000 ft.)	240m (800 ft.)
Horizontal accuracy	±10"	±15"
	(±1.5mm at 30m, ±1/16 in. at 100 ft.)	(±2.25mm at 30m, ±3/32 in. at 100 ft.)
Compensator	Pendulum compensator with air damper	
Compensation range	±10'	
Water resistance	Complies with IPX4 (IEC529), splash protection	
Sensitivity of circular level	10' / 2mm	
Warning	Out of compensation range, Low battery, Rotor malfunctioning	
Operating temperature	-10°C to 50°C (14°F to 122°F)	
Dimensions	W194 x D150 x H232 mm	
Weight	2.5kg (5.5 lb), including D-cell batteries	
Power supply		
Battery case BDC38	Holds four D (R20) size batteries	
Operating duration at 20°C	55 hours with alkaline batteries	50 hours with alkaline batteries
Rechargeable battery BDC39	Rechargeable Ni-Cd battery	
Operating duration at 20°C	20 hours	17 hours
Recharging time	7.5 hours	
AC adapter EDC79	Input voltage: AC 100V to 240V	
*The actual measuring range will depend 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	Complies with IPX7 (IEC529)	
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 or Ni-Cd)	
Operating duration at 20°C	Alkaline: Approx. 100 hours Ni-Cd: Approx 25 hours	
Auto power cut-off	10 minutes after operation	

Designs and specifications are subject to change without notice.

**CLASS1
LASER PRODUCT**

Laser beam is invisible to the naked eye.

FIG Sokkia is a sponsor of the International Federation of Surveyors

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