

LL300 Laser Level





LL300 Launch Training

Outline:

- **Overview and Target Markets**
- **Product Applications**
- **Product Features & Benefits**
- **Sales Issues**
- **How to sell**
- **Sales and Marketing Materials**
- **Service and Support**



LL300 Laser Level



- Fully Automatic Self-leveling laser level
- Suitable for small and medium jobs
- For concrete and GC applications
- Can also be used for shorter range machine control applications



LL300 Launch Training

Target Customer Segment:

- General Construction
 - Residential
 - Concrete
 - Light to Medium Commercial
 - Landscapers, Remodeling
- Site Preparation & Excavating contractors
 - Pool Contractors
 - Septic & fuel storage tank Installers
 - Grading Contractors



LL300 Laser Level System



- Choose Alkaline or Recharge kit
- Choose HR350 or CR600
- System prices start from \$925/€925

Choose HR350 or CR600 Receiver



- Choose the receiver to best suit your needs
- HR350 offers good all-round performance for normal rod and handheld applications
- Use the CR600 for longer range, and machine mounted applications such as excavating



Optional RC601 Remote Control



- Optional remote control
- Can be used for grade matching
- Offers single-axis manual mode for improved accuracy

General Construction Applications

Cut and Fill

- Measuring cut and fill for basic site preparation
- Use the CR600 on a skid steer for straight forward sub-base control



Excavations

- Use the CR600 machine mounted for extra productivity
- Dig basic slopes by grade matching using single axis slope mode



Leveling Forms and Footers

- Checking and adjusting level



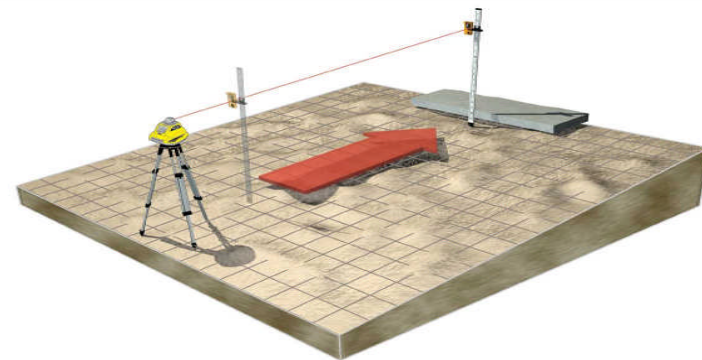
Controlling Concrete Pours



- Measuring the elevation of concrete
- Checking for level across the pad

Driveways and ramps

- The LL300 can be used for grade matching to provide slope control for ramps and driveways
- By placing one axis in manual, and aligning the beam on the finished grade, the laser can be used to check slope on-grade over the full range while maintaining accuracy



4 Foot / 1 Meter Marks

- The LL300 has a spotting beam that is also partially visible in ambient light
- It can be used with or without a receiver depending on light conditions



LL300 Product Features and Benefits



Attractive Design



- New modern look
- Designed for rugged performance
- Fast self-leveling
- Straight forward user interface

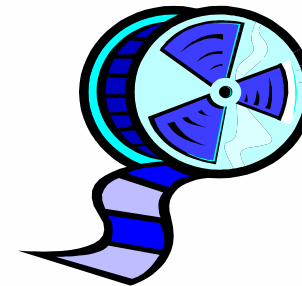
“Hard Hat”



- Designed to take a drop of up to 1 m (3 ft)
- Designed to take a push over of up to 1.5 m (10 ft) on a tripod
- Hard hat can be field replaced in less than 10 minutes
- Calibration can be checked in the field if necessary

Weather Protection

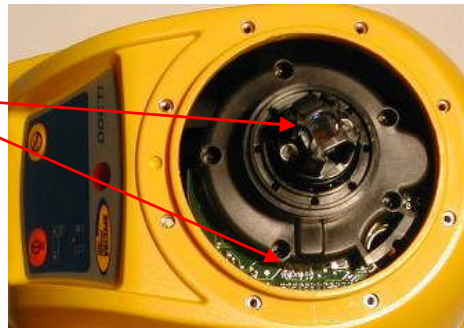
- The LL300 has been put through extensive tests for:
 - Rain
 - Humidity
 - Dust
 - Aggressive temperature changes
 - Shock and vibration
 - Product managers with garden hoses !



QuickTime Movie

Weather and Dust Protection

- **Good weather and dust protection for minimum repair costs**
 - **After this rain test, the whole elastic rubber boot is filled with water**
 - **No water went into the housing**



Battery Charging

- Side mounted charger for easier “in-case” charging or tripod mounted powering
- Easier for the user to charge



Multiple Power Options

- Easy access battery door – no tools required
- D-Cell alkaline batteries: 90 hrs operation
- Standard NiCad recharge kit: 45 Hrs of operation
- Charger can also be used to power unit
- Multiple power options means less down-time due to power loss
- Side mounted charger jack for easier “in-case” charging or tripod mounted powering



Multiple Mounting Options

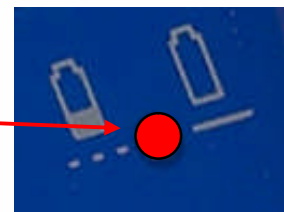
Dual 5/8 x 11 mounting:

- **Level tripod mounting on the unit's bottom**
- **Vertical tripod mounting on the unit's back (use in manual mode)**
- **Provides maximum mounting versatility**

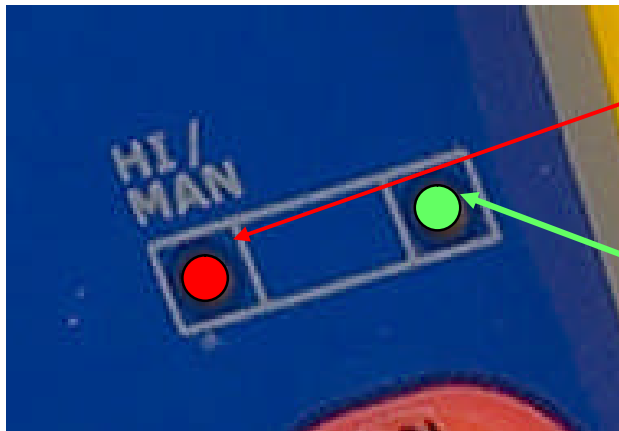


Simple User Interface

- Simple keypad layout
- Transmitter “beep” provides feedback with all control panel actions
- Remote LED “lights” to provide feedback with all button functions
- Two stage low battery indicator provides more information for better scheduling



LED Feedback



- **Red LED flashes when the unit is in manual or when the HI alert has been activated**
- **Green LED flashes while the unit is leveling**
- **Two distinct indications help the user easily understand the operation**



HI Alert

- Warns the user by shutting down the laser if there is a large change in the level position (normally caused by tripod movement etc.)
- When HI alert is activated it will beep continuously and the red level LED will flash
- Operates in both level and single-axis slope mode
- Activates automatically 5 minutes after the unit has been self leveled, giving the user adequate time in single-axis slope mode to benchmark, orient the laser and grade match

Manual Mode

- Overrides the automatic leveling mode
- LL300 keypad: Select Manual or Automatic leveling
- Allows use of the laser in manual mode:
 - Horizontal - for ramps or grades
 - Vertical - for connecting reference points



RC601 Remote Control



- RC601 IR remote control
- 50m range
- Replicates Transmitter functions
- Adds additional single-axis slope mode
- Available optionally for only \$125 / €125
- Standard RC601 compatible with most Spectra Precision Lasers – scan and rotation buttons are not used with the LL300



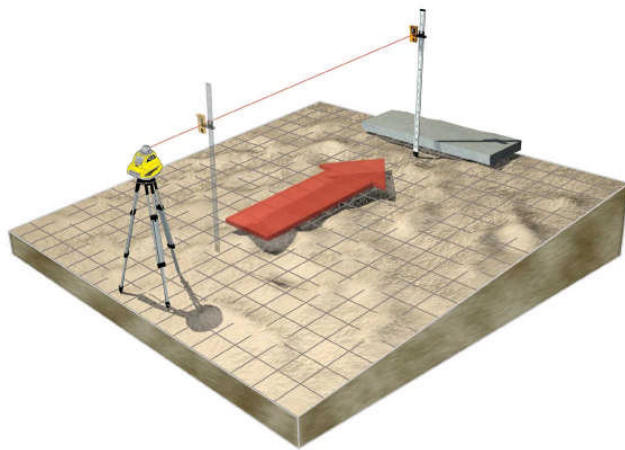
LL300 Remote Sensors

- ◆ Remote operation
range up to 50 m / 150 ft
when sensor is shaded
- ◆ Improved coverage even
for slope set-ups working
on the back of the unit



IR-Receivers

Single Axis Slope Mode



- One axis can remain self-leveling
- Used for basic slope applications such as driveways, parking ramps, and water run-offs
- RC601 Remote Control: Manual, Single Axis Manual, or Automatic leveling
- Option to have single axis slope mode costs only \$125/€125



New Case Label



- Shows the storage location and packing for all the accessories.
- The case will accommodate combinations of:
 - 2 x HR350
 - 1 x HR350 1 x HR550
 - 2 x HR550 1 x HR550
 - 1 x CR600 1 x HR350



LL300 Specifications

Laser Source	635 nm visible, Class 2
Laser Accuracy	±18 arc seconds ±2.6 mm per 30 m (±3/32 in. per 100 ft)
Operating Receiver Range (Diameter)	300 m (1,000 ft) HR300 500 m (1600 ft) CR600
Self-Leveling	Electronic Self Leveling ±5°
Power Source	4 “D” NiCD or Alkaline Batteries
Battery Life (20° C / 68° F)	NiCd: 45 hours Alkaline: 90 hours
Battery Status LED	Flashing Red LED
Battery Recharging Time	Less than 10 hours
Rotation Speed	600 rpm
Out of Level (HI)-Warning	Rotor stops, red out-of-level LED blinks
Out of Level Warning at Receiver	Programmable at dealer, with HR500 and CR600 receivers only
Machine Control Compatible	Yes
Drop Height on Concrete	Up to 1 m (3 ft)
Single Axis Manual Slope Mode	Yes (w/ self-leveling mode on the second axis), with optional RC601 remote control
External Operating Range w/ Optional IR Remote Control (RC601)	Up to 50 m (164 ft)
Operating Temperature	-20° to 50° C (-4° to 122° F)
Warranty	1 year
Weather and dustproof	Yes, IP54

3/27/2008



LL300 Features & Benefits

Summary:

- Unit survives 1 m / 3 ft drops onto concrete even when dropped on it's "hard hat", minimizing downtime and repair costs
- One button operation – for easy set-ups
- Excellent water protection - for all weather conditions
- 2.6 mm at 30 m, 3/32 in at 100 ft accuracy – for good performance
- Spotting beam – for easily finding the beam's elevation
- Two-stage battery indicator – for better planning
- Multiple power options – eliminates power loss downtime
- Optional Remote Control – for grade matching at the receiver

HR350 Hand Held Receiver

- New replacement for the HR300 for General Construction and Interior applications



Composite Material Housing



- Durable in harsh environments
- Easy to carry
- Survives drops of 5'(1.5m)
- EXTREMELY water and dust resistant, to IP67
- Works in wet and dusty conditions

Simultaneous Front/Back LCD and Front LED Display



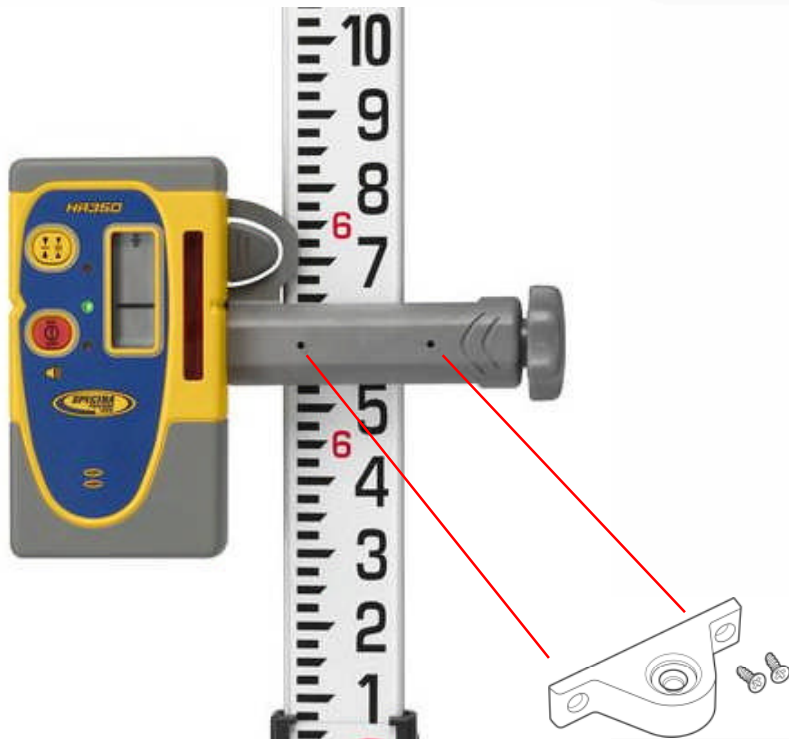
- 5 channel LCD readout (front and back) for outdoor use and simultaneous front display LEDs with green on-grade indication
 - Versatile, lets you choose the best display based on lighting conditions
- Deadband sensitivity: Fine, medium
 - Fits the application need

Improved Clamp and Battery Door



- Easy access door, with IP67 waterproofing – no water gets into the battery compartment
- Ruggedized clamp

Optional Bubble Kit



- An optional clamp bubble kit (P/N 1075-1220) is available to indicate when the rod is plumb



HR350 Features/Specifications

■ Operating range	300 m (1,000 ft) Diameter
■ Display channels	5
■ Photocells	1
■ Beam acceptance angle	90°
■ LCD displays	Front/Rear
■ Front LED Display	2 red/1 green
■ On-grade sensitivities	2 (1.5 / 3 mm)(1/16 / 1/8 in)
■ Batteries	2 x AA
■ Battery life	70+ hours
■ Weight	280 grams (0.6 lbs)
■ Dimensions	2.7 x 7.2 x 13.7 cm (1 x 2.8 x 5.4 in)



CR600 Combination Receiver

- Unique receiver for GC applications
- Can be mounted on excavators for depth control from the cab
- Can be mounted on skid steers for sub-base grading



Magnesium Housing



- 70% stronger than polycarbonate plastic
 - survives drops of up to 3m (10ft) onto concrete
- Waterproof
 - designed to keep working, whatever the weather
- 32% lighter than aluminum
 - comfortable to carry

Linear LCD Display



- 15 channel linear display.
 - No need to go “on-grade” to measure
- Allows easy fixed offsets
 - Quicker to use
- Deadband sensitivity: Fine, medium, coarse, machine fine, machine coarse
 - Fits the application need
- Lost beam direction indication
 - Find on-grade fast

Simultaneous LED Display



- 5 channels
- Long range visibility
 - Practical for long range vertical applications
- Lower power consumption than backlit LCDs
 - Longer battery life
- Easy to read at “high height” operation or from cab

Wrap-Around Photocells



- The CR600 features a long wrap-around photocell for increased pickup coverage

270° coverage

Multiple Mounting Options



- Fits the “no clamp” grade rod
 - Including new cut/fill rod option
- Uses conventional clamps
 - For conventional rods, wood, etc.
- Magnetic mount
 - For basic backhoe mounting

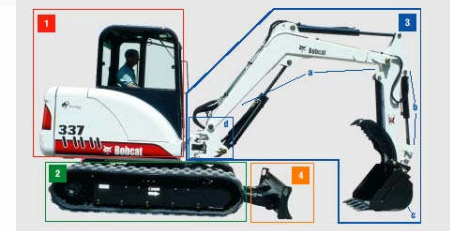
Why CR600 ?

- US Field Population
 - Wheel Excavators: 10,000 (with 6,000 companies)
 - Crawler Excavators: 156,000 (with 44,000 companies)
 - Skid Steers: 282,000 (with 56,000 companies)
 - Backhoes: 256,000 (with 64,000 companies)



Why CR600 ?



- European Annual Sales (not counting what's in the field):
 - Track Excavators 19,000
 - Wheel Excavators 17,000
 - Mini Excavators 37,000
 - Skid Steers 10,000
 - Backhoes 13,000



LL300 Quick Guide

- Small format guide
- Contains key information to help you sell:
 - Pricing
 - Applications
 - Features and benefits
 - Key competitive info

LL300 Quick Guide

PARTNUMBER	DESCRIPTION	LIST PRICE
LL300	LL300 LASER LEVEL W/ HC300	\$ 925.00
LL300-4	LL300 LASER LEVEL W/ HC300, RECHARGE	\$ 995.00
LL300-10	LL300 LASER LEVEL W/ CR600	\$ 1,375.00
LL300-14	LL300 LASER LEVEL W/ CR600, RECHARGE	\$ 1,445.00
RC601	REMOTE CONTROL	\$ 125.00

Applications

- Leveling forms and forms
- Counting concrete pour
- Cur and Fall
- Foundation
- Excavations
- Driveways and ramps
- 4 to 1 in marks
- Residential and light commercial projects

Features

- Automatic Self-leveling
- Rugged hard hat design
- Weather and dust proof
- Multiple power options: Alkaline, Recharge, power from charger
- Long battery life: Alkaline 98 hrs, NiCad 45 hrs
- Single user interface
- Optional remote control
- Manual Mode and Single axis mode (RC601 only)
- Choice of receivers

Benefits

- Fast one button set-up
- Survives tip-overs (<1.5m, 5 ft) and drops (<1m, 3 ft) for reduced repair costs
- Minimum repair costs and downtime
- Reduced downtime caused by power loss
- Reduced downtime caused by power loss
- Quick to learn and easy to use
- Remote control grade matching at the receiver is easier. Allows single axis grade mode
- Unit can be tilted for slope matching. Single axis mode keeps cross axis auto-leveling for better accuracy
- Choose the value priced RC600 for general GC applications, choose the RC600 for basic machine control

	LL300	LL300	LL300	LL300
Accuracy	±2.5 mm at 50m ±3.2 mm at 100m	±2.5 mm at 50m ±3.2 mm at 100m	±1.5 mm at 50m ±2.0 mm at 100m	±1.5 mm at 50m ±2.0 mm at 100m
Diameter Range	1.5m / 4ft 9 in (short) 10.1m / 33ft 0 in (long)	1.5m / 4ft 9 in (short) 10.1m / 33ft 0 in (long)	1.5m / 4ft 9 in (short) 10.1m / 33ft 0 in (long)	1.5m / 4ft 9 in (short) 10.1m / 33ft 0 in (long)
Self-leveling	Compensator	Compensator	Compensator	Compensator
Temperature Compensation	No	No	Yes	Yes
Battery Life	180 hr	98 hr Alkaline 45 hr NiCad	98 hr Alkaline 45 hr NiCad	98 hr Alkaline 45 hr NiCad
Alkaline/Recharge	Alkaline	Alkaline or NiCad	Alkaline or NiCad	Alkaline or NiCad
Receiver Options	HC300 only	HC300, CR600	HC300, CR600	HC300, CR600
GC Markets	Residential Light Commercial	Residential Light Commercial	Light Commercial Large Commercial	Light Commercial Large Commercial
MC Markets		Light Commercial Construction and Site Prep	Light Commercial Construction and Site Prep	Light Commercial Construction and Site Prep

Service and Support



LL300 Service and Warranty

- Unit Warranty is the standard One-Year Parts and Labor guarantee
- Full service training offered for HV301 and LL300 (a Service Manual is provided) for unqualified service technicians
- Update KNet sessions offered for qualified 1452XL platform technicians
- 1452XL platform technicians have a minimum special tooling requirement:
 - Compensator removal tool (~\$105)
 - Boot installation tool (~\$80)



LL300 Field Servicing

- Calibration done with the remote control through the IR sensor
 - Good for adjustments in temperature extremes or after a knock over
- “Hard hat” can be field replaced if damaged after drop

