

# UL633

## Applications

### General Construction

- Levelling concrete forms and footers
- Vertical alignment such as anchor bolt and form alignment

### Machine Guidance Compatible

- Dual slope grading and steep slope excavating
- Slope work for sports fields, tennis courts, driveways, parking garages, ramps

### Pipe and Drainage Installations

- Automatic Alignment for pipe laying
- Measuring unknown slopes in existing pipes

### Interior

- Layout of walls
- Installation of drop ceilings



## The Most Versatile Construction Laser, Ever



The UL633 is the first construction laser to enable the total control of all three axes (X/Y/Z). This is accomplished via unique simultaneous Radio and Infrared communication and also completely new “fan beam” technology for the Z axis.

Benefiting from Spectra Precision’s know-how, the UL633 is appropriate for all applications delivering an easy, fast and accurate job.

### Key Features

#### Total Control of X/Y Axes

- Unlimited Automatic Dual Axis Features
  - High Precision Axis Alignments
  - Simplified Grade Match: measures and displays the existing grade over unknown ground
  - Complete PlaneLok: automatically locks on the laser beam to an existing elevation
- All functions flexible from 10 to 170 degrees
- Horizontal Angle Measurement capability

#### Total Control of Z Axis

- Automatic Detection of plumb beam
  - Spot Align: aligns the plumb beam to a desired position
  - Spot Match: displays the measured Z-axis grade value
  - SpotLok: locks automatically the plumb beam to the SF601 center point

### User Benefits

- Versatility to fit any construction application
- Quickly adapts to site requirements
- Simplifies 90° layout applications
- Reduces time to do slope work and pipe installation



- Manual Detection of plumb beam
  - Spot Search
- Complete Cross Axis Compensation

#### Versatile Communication Links

- Radio (2 radio channels)
- IR

#### Built for Today’s Jobs

- Fully automatic up to +/-25% grade on X/Y/Z axes
- Withstands a 1 m (3 ft) drop onto concrete
- Long operating range - 800 m (2,600 ft) diameter
- Intuitive keypad
- Mask mode
- Various power options
- Automatic temperature compensation
- Electronic leveling vibration filter



# UL633 – Construction Tough – Extremely Reliable – Easiest to Use

## UL633 Specifications

- Leveling accuracy<sup>1,3</sup>: ± 0.5 mm/10 m, 1/16" @ 100 ft, 10 arc seconds
- Grade accuracy<sup>1,3</sup>: ± 1.0 mm/10 m, 1/8" @ 100 ft, 20 arc seconds
- Operating diameter<sup>1,2</sup>: appr. 800 m (2600 feet) with detector
- Grade range (Y;X): ± 25% both axes (not simultaneously)
- Grade range (Z): ± 25%
- Rotation: 0 - 900 rpm
- Scan mode: 5 preset sizes + variable adjustment
- Laser type: red diode laser 650 nm
- Laser class : Class 3A/3R, <5mW
- Self-leveling range: appr. ± 14°
- Leveling indicators: LCD indications and LED flashes
- Radio range (HL750): up to 80 m (260 ft):
- Power source: NiMH battery pack
- Battery life<sup>1</sup>: 35 hours NiMH; 40 hours alkaline
- Operating temp.: -20°C to 50°C (-4°F to 122°F)
- Storage temp.: -20°C to 70°C (-4°F to 158°F):
- Tripod attachments:
  - 5/8 x 11 horizontally and vertically
- Dust and waterproof: Yes - IP67
- Weight: 3.1 kg (6.8 lbs)
- Low voltage indication: LCD battery indicator
- Low voltage disconnection: unit shuts off

## HL750 Laserometer

- Highly versatile receiver for basic and advanced leveling and aligning applications
- Works with UL633 in automatic Axis Alignment, Grade Match and PlaneLok applications
- Key Features:
  - Digital readout of elevation
  - Exact distance from grade displayed
  - Anti-strobe sensor to prevent false reading from jobsite strobe lights
  - Large reception height to ease beam reception
  - Withstands a drop of up to 3m (10ft)
  - Radio communication - works with another HL750 for long range wireless remote display and monitoring capability
- User Benefits:
  - No need to go "on-grade" to measure;
  - Saves considerable time
  - Reduces rework by allowing remote monitoring
  - Increases reliability, accuracy and durability

## RC603 Remote Control Specifications

- Operating range<sup>1,3</sup>: up to 100 m (330 ft)
- Power source: 2 x 1.5V AA alkaline batteries
- Battery life<sup>1</sup>: 130 hours
- Dust and waterproof: Yes - IP66
- Weight: 0.26 kg (0.57 lbs)

## Spot Finder SF601 Specifications

- Operating range<sup>1,4</sup>: up to 80 m (260 ft)
- Power source: 4 x 1.5V AA alkaline batteries
- Battery life<sup>1</sup>: 30 hours
- Dust and waterproof: Yes - IP67
- Weight: 0.43 kg (0.95 lbs)

## HL750 Laserometer Specifications

- Digital readout units: mm, cm, ft, in, frac. in
- Reception height: 127 mm (5 inches)
- Six On-grade sensitivities:
  - Ultra Fine 0.5 mm (~1/32 in)
  - Super Fine 1 mm (~1/16 in)
  - Fine 2 mm (~1/8 in)
  - Medium 5 mm (~1/4 in)
  - Coarse 10 mm (~1/2 in)
  - Calibration Mode 0.1 mm (~1/64 in)
- Battery life (2 x AA): 60+ hours continuous operation
- Auto shut-off: 30 minutes/24 hours
- Operating temp.: -20°C to 50°C (-4°F to 122°F)
- Dust and waterproof: Yes - IP67
- Weight: 0.27 kg (9.5 oz)
- Warranty: 3 Years "No Excuses"

<sup>1)</sup> at 21° Celsius (70° F)

<sup>2)</sup> under optimal atmospheric circumstances

<sup>3)</sup> along the axis

<sup>4)</sup> depending on sun light conditions



RC603 Combined Radio/IR Remote Control for all applications including pipe laying



HL750 Laserometer to measure and display beam location



SF601 Spot Finder for manual and automatic detection of the plumb beam

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