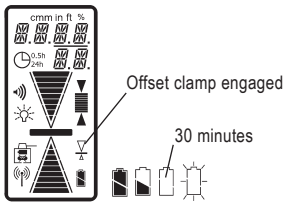
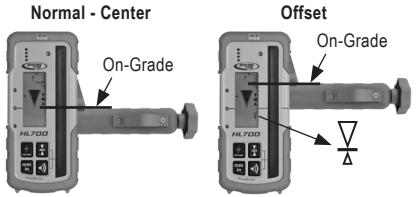
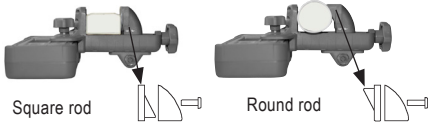
Status Symbols



Offset Clamp Position Engaged



Rod Clamp - Grade Rod Adjustment



Specifications

Working Radius: (Laser dependent):	1 m - 460 m (3 ft - 1500 ft)		
Laser Detection Height:	127.0 mm	(5“)	
Numeric Readout Height:	102.0 mm	(4“)	
Accuracy (Dead band):			
Ultra Fine	0.5 mm	0.02 in	1/32 in
Super Fine	1.0 mm	0.05 in	1/16 in
Fine	2.0 mm	0.10 in	1/8 in
Medium	5.0 mm	0.20 in	1/4 in
Coarse	10.0 mm	0.50 in	1/2 in
Reception Angle:	± 45° minimum		
Detectable Spectrum:	610 nm ... 780 nm		
Beeper Volumes:	Loud = 110 dBA Medium = 95 dBA Low = 65 dBA		
LED Grade Indicators:	Front, Green on-grade, Red Hi, Blue Low		
Power Supply:	2 x 1.5 Volt “AA” batteries		
Battery Life:	60+ hours; 16 continuous backlight		
Automatic Shut Off:	30 minutes		
Environmental:	Waterproof, Dustproof to IP67		
Weight without clamp:	371 g (13.1 oz.)		
Dimensions without clamp:	168.0 x 76.0 x 36.0 mm (6.6” x 3.0” x 1.4”)		
Operating Temperature:	-20°C...+60°C (-4°F... +140°F)		
Storage Temperature:	-40°C...+70°C (-40°F...+158°F)		

*Specifications subject to change without notice.

Warranty

Spectra Precision LLC warrants the HL700 to be free of defects in material and workmanship for a period of three years. Spectra Precision LLC or its authorized service center will repair or replace, at its option, any defective part, or the entire product, for which notice has been given during the warranty period. If required, travel and per diem expenses to and from the place where repairs are made will be charged to the customer at the prevailing rates. Customers should send the product to Spectra Precision LLC or the nearest authorized service center for warranty repairs or exchange, freight prepaid. Any evidence of negligent, abnormal use, accident, or any attempt to repair the product by other than factory-authorized personnel using Spectra Precision LLC certified or recommended parts, automatically voids the warranty. The foregoing states the entire liability of Spectra Precision LLC regarding the purchase and use of its equipment. Spectra Precision LLC will not be held responsible for any consequential loss or damage of any kind. This warranty is in lieu of all other warranties, except as set forth above, including any implied warranty merchantability of fitness for a particular purpose, are hereby disclaimed. This warranty is in lieu of all other warranties, expressed or implied.

Protecting the Environment

The unit, accessories and packaging ought to be recycled.

All plastic parts are marked for recycling according to material type.

Do not throw used batteries into the garbage, water or fire. Remove them in compliance with environmental requirements.

Spectra Precision (USA) LLC
3265 Logistics Lane, Suite 200
Dayton, OH 45377 USA
888-527-3771 (Toll Free)

www.spectraprecision.com

Spectra Precision
(Kaiserslautern) GmbH
Am Sportplatz 5
67661 Kaiserslautern
Germany
+49-6142-2100-0 Phone

Reorder PN 1277-3990 Rev E (05/23)

HL700 Digital Readout Receiver

User Guide

www.spectraprecision.com

EMC Declaration of Conformity

This receiver has been tested and found to comply with the limits for a Class B digital device for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communication, and is pursuant to part 15 of the Federal Communication Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This receiver generates radio frequency. If it’s not used in accordance with the instructions, it may cause harmful interference to radio or television reception. Such interference can be determined by turning the receiver off and on. You are encouraged to try eliminating the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the laser and the receiver.

For more information, consult your dealer or an experience radio/television technician.

CAUTION: Changes or modifications to the receiver that are not expressly approved by Spectra Precision could void authority to use the equipment.

Declaration of Conformity

Application of Council Directive(s):	89/336/EEC
Manufacturer’s Name:	Spectra Precision (USA) LLC
Manufacturer’s Address:	3333 WarrensvilleRd. Unit 200 Lisle, IL 60532 U.S.A.
European Representative Address:	Spectra Precision (Kaiserslautern) GmbH Am Sportplatz 5, 67661 Kaiserslautern, Germany
Model Number:	HL700
Conformance to Directive(s):	EC Directive 89/336/EEC using EN55022 and EN50082-1
Equipment Type/Environment:	ITE/residential, commercial & light industrial
Product Standards:	Product meets the limit B and methods of EN55022 Product meets the levels and methods of IEC 801-2, 8 kV air, 4 kV contact IEC 801-3, 3 V/m 26 to 1000 MHz 80%, @ 1 kHz

HL700 Quick Start

Attach clamp to receiver

Insert and tighten clamp screw into lower thread on rear of receiver

Top of clamp should be aligned with center lines of receiver

1. Press the Power switch to turn ON

Do not power up in a laser beam
Ready after “CAL” disappears

2. Select Units of Measure

mm, cm, in, frac, ft

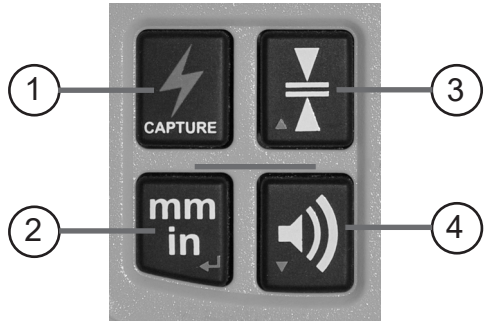
3. Select Accuracy

Five levels Ultra Fine to Coarse
Value displayed based on units of measure selected

4. Select Volume

Four levels - Loud, Medium, Low, Off

Mount to rod or staff and position to receive laser beam.



Keypad Functions

Power ON/OFF

ON - 1 sec
OFF - 2 sec

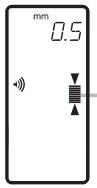
Do not power up in a laser beam

Unit is ready after "CAL" disappears

Units of Measure

mm - cm - in - frac - ft

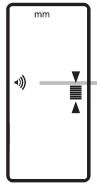
Accuracy



Accuracy in mm:
0.5 1.0 2.0 5.0 10.0

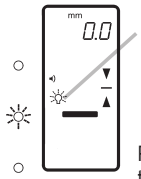
1/32 1/16 1/8 1/4 1/2
Accuracy in frac. inch

Beeper Volume



Beeper Loud
Beeper Medium
Beeper Low

LED Brightness

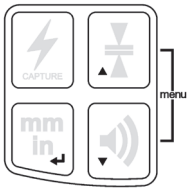


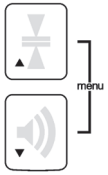
LEDs Bright
LEDs Dim
(No symbol)
LEDs OFF

Press both buttons repeatedly to change LED brightness

Selected settings are retained after power off

Menu Functions





To activate the menu, press both switches at the same time

Enter selection

Navigate "back", To exit

▲ Scroll up

▼ Scroll down

Backlight
- Ativate Menu
- Scroll to LGHT. Enter.
- Scroll to ON or OF. Enter

Sensitivity
- Activate menu.
- Scroll to SENS. Enter.
- Scroll to desired sensitivity. Enter.

Fractional Inches Reduction
- Activate menu
- Scroll to FRC.R. Enter
- Scroll to ON or OF. Enter.

Drift Alarm (Laser in Vertical)
- Activate menu.
- Scroll to DRFT. Enter.
- Scroll to ON or OF. Enter.

Keypad Functions

Capture

To save current reading:
Press CAPTURE
Flashing display confirms saved reading

To CAPTURE and hold reading when receiver is too distant to read directly:
Press CAPTURE
Place receiver in laser beam for 5 seconds
Loud chirp sound indicates reading is captured
Flashing display confirms saved reading

To Exit: Press any switch

Menu Function Flow

Function		Description
LGHT OF	↵	Backlight ON-OFF
▼	LGHT OF	Backlight Off. Enter
	LGHT ON	Backlight On. Enter.
SENS MD	↵	Sensitivity Medium-High-Low Increased sensitity increases distance Lower sensitivity improves strobe light rejection
▼	SENS MD	Select Med sensitivity (recommended; default)
	SENS LO	Select Low sensitivity (to improve strobe light rejection)
	SENS HI	Select High sensitivity to improve distance
FRC.R ON	↵	Fractional reduction ON-OFF
▼	FRC.R ON	Turn on fraction reduction. Example reduce 4/8" to 1/2"
	FRC.R OF	Turn off fractional reduction. Fraction denomimator stays the same. Useful to check fine surface flatness.
DRFT OF	↵	Vertical mode drift alarm. Alerts you that laser has moved
▼	DRFT OF	Vertical drift alarm OFF
	DRFT ON	Vertical drift alarm ON
INFO	↵	Information about receiver
▼	RPS	Displays current rotation speed of laser
	VER + ↵	Displays software version
	MODL	Displays model number code
	S/N + ↵	Displays unit serial number
EXIT		