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 LLC 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:	CR700
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

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")	
Internal Radio:	Full 2-way communication, operation and security lock with paired device		
Radio Working Radius:	Up to 200 m (660 ft), depending on orientation, conditions and paired device		
Accuracy (Deadband):			
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
Machine	25.0 mm	1.00 in	1 in
Reception Angle:	200° (laser and distance dependent)		
Strobe	Anti-strobe sensor		
Detectable Spectrum:	610 nm ... 780 nm		
Beeper Volumes:	Loud = 110 dBA Medium = 95 dBA, Low = 65 dBA		
LED Grade Indicators:	Green on-grade, Red Hi, Blue Low		
Brightness:	Off, Bright, Super-Bright		
Power Supply:	3 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:	471 g (16.6 oz.)		
Dimensions w/o clamp	98 x 200 x 37 mm (3.9" x 7.8" x 1.5")		
Operating Temperature:	-20°C...+60°C (-4°F... +140°F)		
Storage Temperature:	-40°C...+70°C (-40°F...+158°F)		
Regulatory	CE EMC / RoHS Compliant		

*Specifications subject to change without notice.

Warranty

Spectra Precision LLC warrants the CR700 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

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Reorder PN 1278-0100 Rev B (EN) (05/23)



CR700
Combination Receiver Machine Mount / Rod Mount

User Guide

Contents



CR700 Receiver, C71 Magnet Clamp, C70 Grade Rod Clamp, 3 x AA Alkaline Batteries, User Guide

Attach Clamp



Attach the CR700 to the C71 magnet clamp for machine mounting



Attach the CR700 to the C70 grade rod clamp for rod mounting

CR700 Quick Start

Machine Mounted



Set up the laser to the desired grade. The laser should be within 200m (660 ft) of the machine.

Plumb the dipper stick. Position the bucket on height benchmark, or at correct depth.

Attach the CR700 to the C71 magnet clamp.

Adjust deadband to desired accuracy (5, 10 or 25mm).

Attach CR700 assembly to the dipper stick. Adjust height to be on grade (green lights).

While digging, bring dipper stick to plumb position and lower to dirt depth to determine height from desired grade.

Rod Mounted



Set up the laser to the desired grade.

Attach the CR700 to the grade rod clamp.

Attach the assembly to a grade rod.

Adjust deadband (accuracy) and volume as desired.

Place the grade rod on a height benchmark or to desired grade.

Adjust the grade rod to "on grade" (green light).

While checking other locations, the LED arrows indicate high or low while the LCD provide digital distance from grade.

Vertical Mounted

Set up the laser in vertical mode.

Consider setting CR700 to Drift Alarm (see menu) to enable warning if the laser is disturbed.

Consider using Planlok to set laser direction. With Planlok, the laser will find the CR700. Must use a laser that can be paired with CR700.

CR700 can be placed directly on a floor in a building. Vertical adapter 105516 (sold separately) may be useful to attach to a batter board or tripod.



NOTE: Do not power up receiving a laser

CR700 is ready after "CAL" disappears from LCD

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Authorized Spectra Precision Dealer

Keypad Functions

Power ON/OFF





ON - 1 sec
OFF - 2 sec

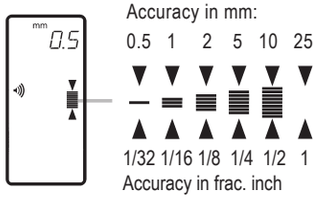


Do not power up in a laser beam

Unit is ready after "CAL" disappears

Accuracy





Accuracy in mm:

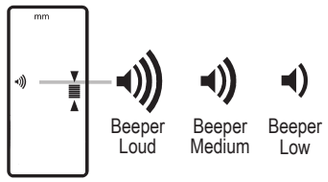
0.5 1 2 5 10 25

1/32 1/16 1/8 1/4 1/2 1

Accuracy in frac. inch

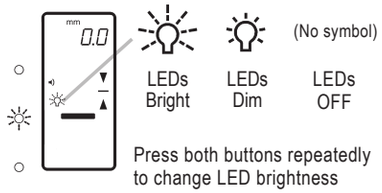
Beeper Volume





LED Brightness





Press both buttons repeatedly to change LED brightness

Selected settings are retained after power off

Menu Functions



Menu activation "Back" key



△ Scroll Up



▽ Scroll Down



↵ Enter

Backlight
- Activate menu.
- Scroll to LGHT. Enter.
- Scroll to On or Off. Enter

Pair with Laser. This will enable laser functions GradeMatch and PlanLok.
- Activate menu.
- Scroll to RDIO. Enter.
- Scroll to RDIO LS. Enter
- Scroll to PAIR. Enter and also press appropriate buttons on laser (Manual and Power On)

Pair with another HL760 to be used as remote
- Activate menu.
- Scroll to RDIO. Enter.
- Scroll to RDIO HL. Enter
- Scroll to PAIR. Enter. And also perform same function on the other HL.
- Power receiver Off.
- The first receiver powered on is "laser receiver". The second displays "RMT.D okay" Press enter to accept as remote display

Unit of Measure
- Activate menu.
- Scroll to UNIT
- Scroll to desired unit of measure. Enter

Sensitivity. Increased sensitivity – longer distance. Decreased sensitivity – better strobe light rejection.
- Activate menu.
- Scroll SENS. Enter.
- Scroll to desired sensitivity. Enter

Fractional inches reduction. Fraction denomimator stays the same. May be useful to check fine surface flatness. Example converts 4/8 in to ½ in.
- Activate menu.
- Scroll to FRC.R. Enter
- Scroll to On or Off. Enter

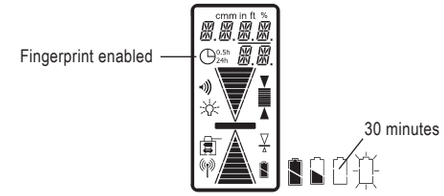
Drift Alarm (when laser is in vertical orientation. This results in no sound when aligned, but beeper alarms when laser is disturbed)
- Activate menu.
- Scroll to DRFT. Enter.
- Scroll to On or Off. Enter

Fingerprint. CR700 will react only with paired laser, rejecting other laser strikes
- Activate menu.
- Scroll to FRPT. Enter.
- Scroll to On or Off. Enter

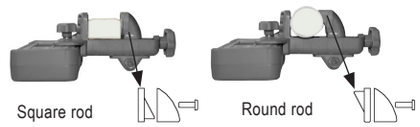
Menu Function Flow

Function		Description
LGHT OF	↵	Backlight ON-OFF
▼	LGHT OF	Backlight Off. Enter
	LGHT ON	Backlight On. Enter.
RDIO	↵	Radio functions
▼	RDIO LS	Connect with laser
	RDIO HL	Connect with another receiver for remote display
	RDIO OF	Communications Off
PAIR	↵	Pair with selected device (Laser or Receiver)
	PAIR +	Pair with device now. Enter.
UNIT MM	↵	Unit of Measure MM-CM-IN-FRAC-FT
	MM	Select Millimeter
	FT	Select Feet
	FR	Select Fractional Inches
	IN	Select Decimal Inches
	CM	Select Centimeter
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
FPRT ON	↵	Fingerprint locks on to paired laser. Other lasers are rejected.
▼	FPRT ON	Fingerprint ON
	FPRT OF	Fingerprint OFF

Dispaly Status Symbols



Rod Clamp - Grade Rod Adjustment



Optional Vertical Adapter



Vertical Adapter PN 105516
Threads to mount on 5/8x11 or 1/4 inch tripod.

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