Technical Specs Sheet

General - Railmaster II®

Type	Stationary hand held directional Doppler radar
Accuracy	± 1 unit of measure (± 1 mph, ± 1 km/h, ± 1 m/s, ± 1 fps, ± 1 knot)
Ambient Operating Temperature	-22°F to +158°F (-30°C to +70°C)
Audio	Five (5) audio volume levels
Beep Volume Setting	1, 2, 3, 4, 5 (Max) or OFF
Charging Port	USB-C
Communications	RS232
Controls	Rubber keypad with Power (PWR), Menu , Recall (RCL) buttons and Trigger switch
Directionality	Measures approach and recede targets
Directional Settings	Approach only, Recede only, Both directions
Display	Color LCD with backlight
Display LCD	Displays target and locked target speeds along with all menu options and message icons including Xmit, Hold, Lock and battery level with % level left.
Features	DSP, 32 bit processing. All features saved on power down.
Frame	Housing is a rugged ABS Polycarbonate Blend
Light Indicators	Green Charge Status
Maximum Humidity	90% relative humidity @ +98.6°F (+37°C)
Menu Settings	Speed Range, Dimmer (Auto or Manual), Beep (ON or OFF), Units, COM port settings, Auto Shutdown (<5, 10, 15 minutes or OFF)
Range Settings (Sensitivity)	1, 2, 3, 4 or 5 (maximum range)
Speed Measurements	**mph** (miles-per-hour), **km/h** (kilometers-per-hour), **m/s** (meters-per-second), **fps** (feet-per-second), **kn** (knots)
Speed Ranges	See page 2
Standard Warranty	2 years parts & labor
Track Through Lock	Lower speed strongest, upper display speed is locked.

Mechanical

Dimensions	8.25" (H) x 3.5" (W) x 3.75" (L) (20.955 cm x 8.89 cm x 9,525 cm)
Weight	1.8 lbs (0.816 kg)

Electrical

Battery	Internal Lithium-Ion (Not User Servicable)
Battery Low Voltage Shutdown (with antenna on)	+6.0 VDC
Detachable Charging Cable	USB to USB-C
Runtime Between Charges	Approximately 1 week with normal use.

www.decaturelectronics.com

**920 S. Andreasen Drive
Suite 103
Escondido, Ca. 92029**

**800.428.4315
Outside USA 217.428.4315**

Antenna

K-Band	FCC Part 15
Nominal Transmission Frequency	24.125 GHz
Nominal Horizontal Beamwidth	12° H, 24° V
Polarization	Linear (Vertical)
Nominal Microwave Power Output	7mW
Maximum Aperture Power Density	<1 mW/cm^2

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Speed Ranges

mph (miles-per-hour	Low Speed	0.5 to 150	Medium Speed	10 to 225	High Speed	20 to 311
km/h (miles-per-hour	Low Speed	0.8 to 241	Medium Speed	16 to 362	High Speed	32 to 500
m/s (miles-per-hour	Low Speed	0.2 to 67	Medium Speed	4 to 100	High Speed	9 to 139
fps (miles-per-hour	Low Speed	0.7 to 220	Medium Speed	14 to 330	High Speed	29 to 456
knots	Low Speed	0.4 to 130	Medium Speed	8 to 195	High Speed	17 to 270

Communication Selections (Serial)

Com 0	No Output	Com 5	No Output – Legacy Support
Com 1	Diagnostic	Com 6	No Output – Legacy Support
Com 2	Diagnostic	Com 7	
Com 3	No Output – Legacy Support	Com 8	No Output – Legacy Support
Com 4	No Output – Legacy Support	Com 9 &10	

Serial Format

Standard serial communications has the following characteristics (8N1) and is transmit only:	• One (1) start bit • Eight (8) data bits • No parity • One (1) stop bit • Transmission at 1200 baud
Data is transmitted as ASCII symbols in the following digital sequence:	[hundreds] [tens] [ones] (<CR>=ASCII decimal value 13)