

Vanguard Velo L/S



The Vanguard™ System — Warranty

The Daugherty Companies, Inc. warrants to the original purchaser for use that, if any part of the product proves to be defective in material or workmanship within one year from date of original installation, and it is returned to *The Daugherty Companies, Inc.* within 30 days after such defect is discovered, *The Daugherty Companies, Inc.* will (at our option) either replace or repair said part. This warranty does not apply to damage resulting from misuse, neglect, accident or improper installation or maintenance. Said part will not be considered defective if it substantially fulfills the performance specifications.

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GPS Digital
Speed Display

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Type of Monitor	Constant	Hz/mph	Connector Type
DICKEY-john PM 400	7773	57	4-Pin Amp
Vanguard VM-1600	1950	57	4-Pin Amp
Vanguard VM-2300	7773	57	4-Pin Amp
Vanguard VM-2500	7773	57	4-Pin Amp
Vanguard VM-2500SE	7773	57	4-Pin Amp
Vanguard VM-2600/2800	7773	57	4-Pin Amp
Vanguard VM-2900	7773	57	4-Pin Amp
Vanguard VM-4600	7773	57	4-Pin Amp

If these numbers do not match the speed on your unit, please use your 400ft setup.

Type of Monitor	Constant	Hz/mph	Connector Type
MT84 Calc/FlowTrak	1.74	10.12	2 Pin w/ Adapter
Hiniker Acre Commander	26.931	10.12	3-Pin Cannon
Hiniker Computer Facts	13206.661	10.12	3-Pin Cannon
Hiniker Spray Commander	378.583	10.12	3-Pin Cannon
Hiniker 8100	24.5	10.12	3-Pin Cannon
Autotrol	.875	10.12	3-Pin Metri-Pack
Calc-An-Acre	.875	10.12	3-Pin Metri-Pack
Calc-An-Acre II	.239	57	3-Pin Metri-Pack
Flow Trak	.875	10.12	3-Pin Metri-Pack
Flow Trak II	.239	57	3-Pin Metri-Pack
GSC-1000	.239	57	3-Pin Metri-Pack
MT Gen I & MT-340F	.90	10.12	3-Pin Metri-Pack
MT Gen II, MT-3405F II	.189	57	3-Pin Metri-Pack
NT-NH311	.239	57	3-Pin Metri-Pack
MT-2405F	.875	10.12	3-Pin Metri-Pack
MT-2405F II	.239	57	3-Pin Metri-Pack
MT3405D	.239	57	3-Pin Metri-Pack
MT3405F	.875	10.12	3-Pin Metri-Pack
MT3405F II	.239	57	3-Pin Metri-Pack
MT9000	.90	10.12	3-Pin Metri-Pack
ProPlant	.239	57	3-Pin Metri-Pack
ProSeed	.239	57	3-Pin Metri-Pack
RoadMaster	.239	57	3-Pin Metri-Pack
SodPro	.875	10.12	3-Pin Metri-Pack
SodPro II	.239	57	3-Pin Metri-Pack
Speed-O-Matic	.875	10.12	3-Pin Metri-Pack
SprayMate	.875	10.12	3-Pin Metri-Pack
SprayMate II	.239	57	3-Pin Metri-Pack
MT3000	1.8	10.12	3-Pin Weather-Pack
Tee-Jet 844	1150	57	3-Pin Deutch
Tee-Jet 855	1167	57	3-Pin Deutch
Raven 440, 460	586	57	3-Pin Conxall
DICKEY-john 3000	1480	57	4-Pin Amp
Early Riser	7773	57	4-Pin Amp
John Deere 200 & 300	7773	57	4-Pin Amp
Mid-Tech ARC6000	1220	57	4-Pin Amp
Seed Manager	7773	57	4-Pin Amp
DICKEY-john PM 300	1480	57	4-Pin Amp

The Vanguard Velo L/S GPS Digital Speed Display User Manual



Introduction

The Vanguard Velo L/S Digital Speed Display uses GPS to give you an accurate ground speed. It features a large digital display and GPS status lights. On the left end of the unit is a 4-pin AMP connector that is used to connect to power or to your monitor. Included with your unit is an antenna that connects to the end of the display box. This should be mounted near the window of your cab or on top of the cab.

Features: When in operation, the display will show your true ground speed and will transmit it directly to most agricultural monitors and controllers. Upon initial power up, the unit will search for satellites and once it locks onto the required number of satellites, the green light will appear and it will produce speed. For additional accuracy, the unit will continue to gather satellite data and connect to WAAS after a few minutes. WAAS reception is indicated by the red LED. Note: WAAS is not required for the unit to operate.

Installation

Direct to monitor: When you receive your Velo L/S, connect your antenna and it will be ready to hook up to most 4-pin Vanguard, DICKEY-john, Case and Agco directly. Simply connect your monitor speed connector to the Velo L/S 4 pin connector. The unit will be powered by your monitor. If you are using a Y cable or an in Cab outlet that only provides signal and ground, the unit will not work... it must have a direct connection to the monitor or through a powered Y cable.

Hooked with an Adapter: If your monitor does not have a 4-pin AMP connector, you will need an adapter cable. Generally these will be Raven, Hiniker, Micro-Trak and Tee Jet monitors or if you are connecting to a tractor radar cable. Please note that a 2 wire connector will not work, you will need a powered connection. Call us at 1-800-258-2415 for assistance if you run into problems. Most adapters are available from your dealer or from The Daugherty Companies, Inc.

Stand Alone Speed: For use on utility vehicles, automobiles, golf carts and other vehicles, a cigarette lighter plug power cord is available. (Part No. VG2004P) Simply plug in and go.

Settings

Your Velo L/S has several options that the user may choose from. The radar out pulse rate is one of the major ones for use with monitors that require a slower pulse rate such as Hiniker and Micro-Trak.



On the bottom of the unit is a pin-hole for inserting a paper clip or similar object. Depress and hold until **E.--** appears. At this point, you can press long to escape or short to advance.

(Settings continued on the next page)

1	Radar out Pulse Rate	1	10.12 Hz / MPH
		2	44 Hz / MPH
		3	57 Hz / MPH (default)
2	Speed Units	1	MPH (default)
		2	KPH
3	Loss of GPS Radar Delay	1	2 Seconds (default)
		2	10 Seconds
4	Satellites Required before Radar Out	1	3 Satellites
		2	4 Satellites (default)
		3	5 Satellites
		4	6 Satellites
		5	7 Satellites
5	Minimum Speed Required before Radar Out	1	0.25 MPH
		2	0.50 MPH
		3	0.75 MPH
		4	1.00 MPH (default)
		5	1.25 MPH
		6	1.50 MPH
6	WAAS Enable	1	Enable (default)
		2	Disable
7	Accelerometer Motion Threshold Detect	1	0.01 g's
		2	0.02 g's
		3	0.03 g's (default)
		4	0.04 g's
		5	0.05 g's
		6	0.06 g's
		7	0.07 g's
		8	0.08 g's
8	Adaptive Speed Filter (default)	1	Mincutoff = 0.1 Beta = 0.3 Dcutoff = .08
		2	Mincutoff = .04 Beta = 0.05 Dcutoff = 0.09

After pressing short to advance, display shows:

1. 3



2. 1

Press short to advance, or press long to enter change mode – unit will flash at which time you may use short pulses to make changes. Once you have made your change, press long to return to Settings. Advance through the list with short pulses until you return to Escape **E.--**. A long press will return you to operate mode.