

## Astro Series GPS Speed Sensor

Instructions

### INSTALLATION:

**RECEIVER:** The GPS receiver may be mounted either externally (roof of the cab or other place with a clear view of the sky) or inside the vehicle cab. However, if mounted inside the cab there may be some loss of accuracy due to blockage of satellite signals. For most reliable operation, mount the GPS receiver in a location where it has an unobstructed view of the sky. The bottom plate on the receiver provides a magnetic mount, or you can use the provided dual-lock Velcro to attach the receiver. If using the dual-lock, thoroughly clean the surface, remove the backing from the dual lock, and press firmly to the surface.



**WIRING:** Route the 10 foot cable from the receiver into the cab (if receiver is externally mounted). Avoid sharp edges or heat sources. The rectangular module is roughly the same size as the connector and will fit through the same opening.

**MODULE:** The small potted module includes a power indication light and a GPS status light. The module can be attached in a visible spot using the dual-lock, or if desired may be tucked out of sight.

**CONSOLE CONNECTION:** Connect the short cable from the Astro to the speed sensor connector on your console. The standard Astro is available with either a 3-pin Packard Metri-Pak shroud connector or a 3-pin Weather-Pak shroud connector to mate to Micro-Trak products. Other connectors and/or adapters are available to connect to other console makes/models.

## **CALIBRATION:**

**OUTPUT SIGNAL:** The Astro will output a 50% duty cycle square wave proportional to vehicle speed. The standard output is 46.56 Hz/MPH, but the user can select the low frequency option (10.115 Hz/MPH) by cutting the wire loop on the module. The low frequency option should be used with older Micro-Trak Generation I base products or some consoles from other vendors to allow a reasonable maximum speed. See table below.

**SPEED CALIBRATION:** The table below provides speed calibration numbers and indicates whether or not the wire loop should be cut. Perform your "fine-tuning speed/distance value" procedure per your installation manual. If you have questions, please refer to the operator's manual for your console, or call Micro-Trak's Service Department at 1-800-328-9613.

Console Type		Speed Cal		Wine Lean	Connector Turn	Part Number	
		English	Metric	Wire Loop	Connector Type	Astro II	Astro 5
SodPro II, ProPlant II, ProSeed, GSC-1000, MT-3405D, MT-NH3 II, SprayMate II, Calc-An-Acre II, FlowTrak II, MT-2405F II, MT-3405F II, RoadMaster, Whirwind		0.189	0.48	Do NOT Cut	3-Pin Metri-Pak Shroud	01410	01425/ 01437
MT-NH3, SprayMate, MT-403/MT-400, Calc-An-Acre LR, FlowTrak LR, MT-2405F, MT-3405F, SodPro, AutoTrol, MT-9000		0.90	.022	Cut	3-Pin Metri-Pak Shroud	01410	01425
Speed-O-Meter		6910	4800	Cut	3-Pin Metri-Pak Shroud	01410	01425
MT-3000/MT-5000		1.80	.044	Cut	3-Pin Weather-Pak Shroud	01411	01426
Raven 440, 460 etc. *		783	200	Do NOT Cut	3-Pin Conxall	01415	01430
Calc-An-Acre 84C, FlowTrak 84C/FT96C		1.70	.044	Cut	2-Pin w/Adapter	01412	01427
Mid-Tech ARC6000		994	1000	Do NOT Cut	4-Pin Amp CPC	01413	01428
dickey-John Amp		6146	N/A	Do NOT Cut	4-Pin Amp CPC	01413	01428
Tee-Jet 844		923	923	Do NOT Cut	3-Pin Wedge-Lock Reception	01417	01432
Tee-Jet 855		923	923	Do NOT Cut	3-Pin Deutch Plug	01419	01433
Hiniker	Computer Facts	13584	N/A	Do NOT Cut	3-Pin Cannon	01420	01435
	Acre Commander	27.70	N/A				
	Spray Commander	389.4	N/A				

<sup>\*</sup> Set Raven Console for SP2 - Radar Speed Sensor



# **Astro Series GPS Speed Sensor**

Instructions (cont.)

## Operation:

Like all GPS receivers, the Astro requires time to acquire the satellites and stabilize before it begins to output a speed signal. The Astro includes two red lights on the interface module, (See Illustration) to indicate status of power to the Astro and the status of the GPS receiver:

- Power: turns on when power is applied to the unit
- Valid GPS: blinks when the GPS receiver is working but has not yet acquired a satellite fix. Once a fix has been acquired, it will be on steadily. If the GPS system fails, the light will turn off.

### Typical startup times:

- Sky search to acquire almanac = 5 minutes
- Cold start = 2.5 minutes

IMPORTANT NOTE: If this is the initial hookup or your Astro has been off for 4 days or more you MUST allow for a minimum of 5 minutes for the Astro to acquire a signal.

Warm start = 30 seconds Micro-Trak MT-3000 P/N# 01411 / 01426 To MT-3000 Controller Connect to ground Hook up Raven 440/460 P/N# 01415 / 01430 To speed input on Raven harness To SOLID orange wire (aux. power) on Raven harness (Do NOT connect to

NOTE: Set Raven Console to SP2 - Radar Speed Sensor

orange wire with white stripe)

Micro-Trak Base Products P/N# 01410 / 01425

> Red = Signal White = Power Black = Ground

**GPS Status** 

Power On

Hook up Hiniker P/N# 01420 / 01435

To +12 VDC

Source

**Extended Warranty Option** 

It's simple! Just complete the registration for this product ONLINE at www.micro-trak.com and we'll extend your warranty for up to three years\*, at no additional charge.

Registration information is for internal use only.

\* Some limitations apply. See warranty statement for details.