

GPS Module for DriveRight 600

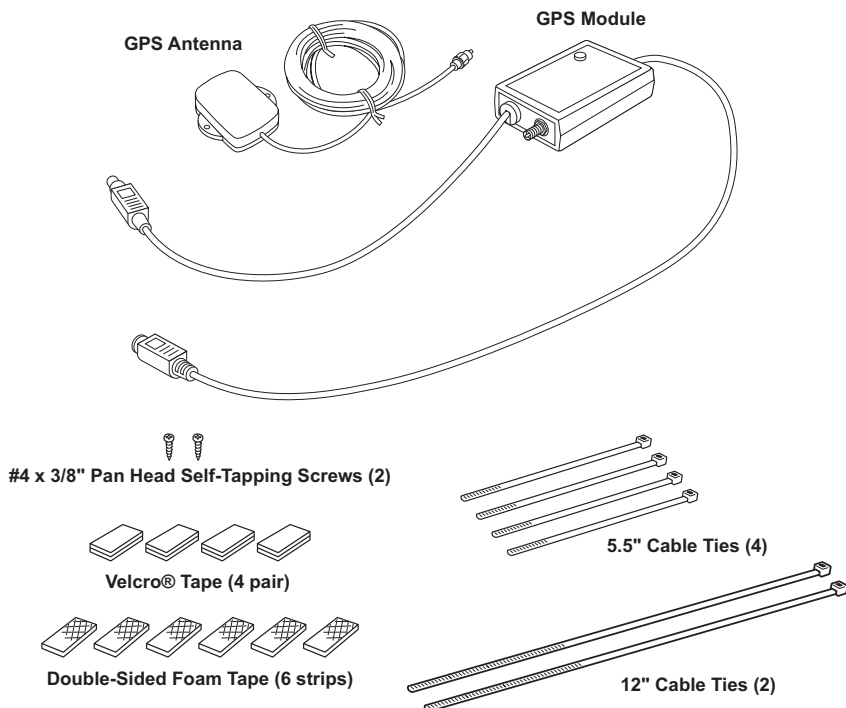
Installation Manual

This manual provides the instructions necessary to install the DriveRight GPS module and to connect it to the DriveRight 600.

The DriveRight 600 User's Guide and the DriveRight software help contain information on how to use the GPS module with your DriveRight 600.

GPS Components and Mounting Hardware

The following components and mounting hardware are included with the GPS Module.:



Installing the GPS Module

1. Mount the GPS Module under the dashboard of the vehicle.
2. Secure the GPS Module in place using the provided cable ties, velcro tape, or double-sided tape.

Installing the GPS Antenna

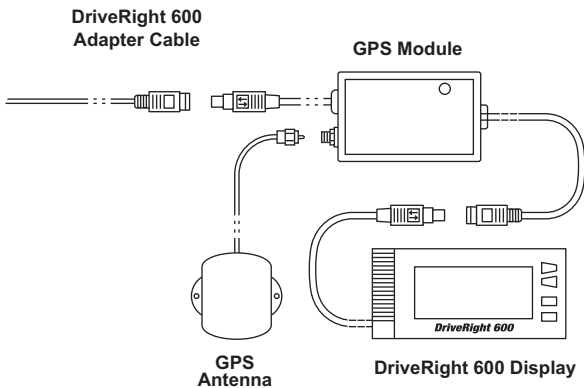
1. Mount the GPS antenna on top of the dashboard, on the roof of the vehicle, or on the truck.
 - Locate the antenna so that it has a clear view of the sky. Any metal obstructions may interfere with satellite reception.
 - The antenna must be at least three (3) feet away from any cellular or CB antenna.
 - Close proximity to a transmitting antenna may degrade or disrupt GPS reception.
2. Secure using two screws, double-sided tape, velcro, or magnetic mounting.
 - To use the magnetic mount you must remove the aluminum base plate to expose the antenna's neodymium magnets.
3. Route the antenna cable to the GPS module.

Making Connections

Refer to the diagram on the next page when making the following connections.

1. Connect the GPS Antenna to the GPS Module
2. Connect the GPS Module to the DriveRight harness cable using the DriveRight 600 adapter cable.
3. Connect the GPS Module to the DriveRight 600.

Installation Diagram



GPS Specifications

General GPS Specifications	
Mechanical	Size: 3.8" x 2.4" x 0.9" (97 x 61 x 23 mm) Weight: 11 oz (0.3 kg)
Environmental	Operating Range: -4°F to +140°F (-20°C to +60°C) Storage Range: -40°F to +185°F (-40°C to +85°C)
Power	Input: +12Vdc to +16 Vdc regulated, 80 mA max Memory Backup: lithium cell, estimated 5 year service life
Interface	GPS Module-to-adapter cable: male 8-pin Mini-DIN GPS Module-to-DriveRight 600: female 8-pin Mini-DIN GPS Antenna: female SMA
Cable Length	GPS Module-to-adapter cable: 12" (300 mm) GPS Module-to-DriveRight 600: 22" (570 mm)
GPS Receiver Specifications	
Basic	Channels: 12 parallel Frequency: 1575.42 MHz (L1)
Accuracy	Position: 25 m SEP without selective ability (SA), 100 m 2 DRMS with SA (95 %) Velocity: 0.04 mph (0.02 m/s) without SA
Dynamic Limits	Acceleration: 4 G max Jerk: 5 m/s ³
Startup Time	DriveRight unplugged for 0 hours = 30 seconds to first fix DriveRight unplugged for more than 0, less than 4 hours = 60 seconds to first fix DriveRight unplugged for more than 4, less than 8 hours = 90 seconds to first fix DriveRight unplugged for more than 8, less than 24 hours = 120 seconds to first fix DriveRight unplugged for more than 24 hours = 180 seconds to first fix
Reacquisition Time	After 60 second signal obstruction: 5 seconds Internal: <1.0 second
GPS Antenna Specifications	
Mechanical	Size: 2.3" x 1.9" x 0.55" (58 x 48 x 14 mm) Weight: 2.3 oz (0.065 kg)
Environmental	Operating Range: -22°F to +185°F (-30°C to +85°C) Storage Range: -40°F to +194°F (-40°C to +90°C)
Power	Input: +3 Vdc regulated, 12 mA ± 2 mA
Cable	Type: Coaxial RG-174 Length: 16 feet (5 m) Connector: male SMA
Performance	Frequency: 1575.42 MHz (L1); Gain: 25 dB (min); Output Impedance: 50 Ohms

Contacting Davis Technical Support

If you have questions, or encounter problems installing or operating your DriveRight 600, please contact Davis Technical Support.

Note: *Please do not return items to the factory for repair without prior authorization.*

Phone Support

(510) 732-7814 – Monday – Friday, 7:00 a.m. – 5:30 p.m. Pacific Time.

(510) 670-0589 – Fax to Technical Support.

Email Support

support@davisnet.com – E-mail to Technical Support.

info@davisnet.com – E-mail to Davis Instruments.

Web Support

www.davisnet.com – Copies of User Manuals are available on the “Support” page. Watch for FAQs and other updates.

FCC Part 15 Class B Registration Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modification not expressly approved in writing by Davis Instruments may void the warranty and void the user's authority to operate this equipment.

Product Number: 8157
GPS Module Installation Manual
Rev B Manual (December 12, 2002)

Davis Instruments Part Number: 7395.190

This product complies with the essential protection requirements of the EC EMC Directive 89/336/EC. The term "IC:" before the radio certification number only signifies that Industry of Canada technical specifications were met.

Copyright © 2002 Davis Instruments Corp. All rights reserved.



3465 Diablo Avenue, Hayward, CA 94545-2778

510-732-9229 • Fax: 510-732-9188

E-mail: info@davisnet.com • www.davisnet.com