



**DAVIS** 

# ***DriveRight***<sup>®</sup>

*Fleet  
Management  
Software v 3.5*

*Getting Started Guide*



*CarChips*



*DriveRights*



*Drivers*



*Vehicles*

**Product #8186**

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DriveRight Fleet Management Software Getting Started Guide

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# Introduction

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The DriveRight Fleet Management Software (FMS) package allows you to store, view and manipulate DriveRight data on your PC. More specifically, FMS provides tools for sorting, tracking, analyzing and printing data, and viewing and printing reports for a number of individual DriveRight consoles. This guide is intended to get you up and running with DriveRight FMS in the shortest time possible.

## DriveRight FMS Features

- Supports the following devices: CarChip Fleet, DriveRight 600, Trip 500AL, Trip 130AL, and Trip Computer.
- Supports the optional Palm Download Kit, which allows a DriveRight console to be downloaded without disconnecting it from the vehicle.
- Automatic backup option allows the user to define the number of months of data kept in the active database.
- A new location field in the database facilitates “rolling up” data, making it possible to manage data from many locations in one database.
- FTP support simplifies uploading data to higher levels in the organization while preserving location information.
- Sophisticated reporting on driver safety and vehicle usage.
- Works with a variety of popular SQL relational databases: MS Access, MySQL, MSDE, MS SQL Server, and Oracle.
- Installation of MS Access or MSDE is integrated into DriveRight FMS. No extra software or licenses required.
- Password security for data access and program functions.
- Exports GPS data to Microsoft MapPoint software.
- New Wizard for adding DriveRight consoles to the database.
- New context-sensitive help.

## Package Contents

Before installing the software on your PC, make sure your package includes the following items:

- **DriveRight download cable** — A black interface cable to connect a DriveRight device to your PC. This may be a molded one-piece cable or a three-piece cable consisting of a black box with two cables attached to it.
- **CarChip download cable** — A black interface cable and power supply (for serial port versions only) for CarChip.
- **DB25 connector and DB9 connector** — A 25-pin and a 9-pin connector with modular “telephone” plugs to connect to a serial port in your PC.

## Connecting DriveRight to Your PC

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- **DriveRight FMS software CD** — The CD contains the DriveRight FMS software as well as special CarChip software to view engine performance data.

### System Requirements

DriveRight FMS requires the following:

- Computer running Windows 98 SE, ME, NT 4.0, 2000 or XP.
- 32 MB memory (64 MB recommended).
- VGA/SVGA monitor (800 x 600 or higher recommended).

### Optional

- MS Excel required to view reports in Excel.
- MS Excel and MS Outlook required to email reports.
- MS MapPoint required to map GPS data.

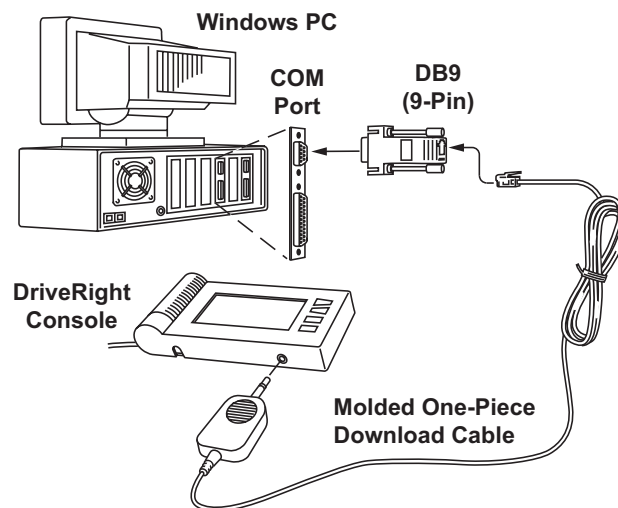
### Additional DriveRight FMS Documentation

Refer to the following sources for additional information:

- DriveRight FMS Help.
- “DriveRight FMS User’s Manual,” located in the *User’s Manual.pdf* file in the FMS program folder and on the CD.
- “DriveRight FMS Database Selection Guide.”

## Connecting DriveRight to Your PC

Connect the DriveRight console to a serial port on your PC using the hardware and cable as shown below.

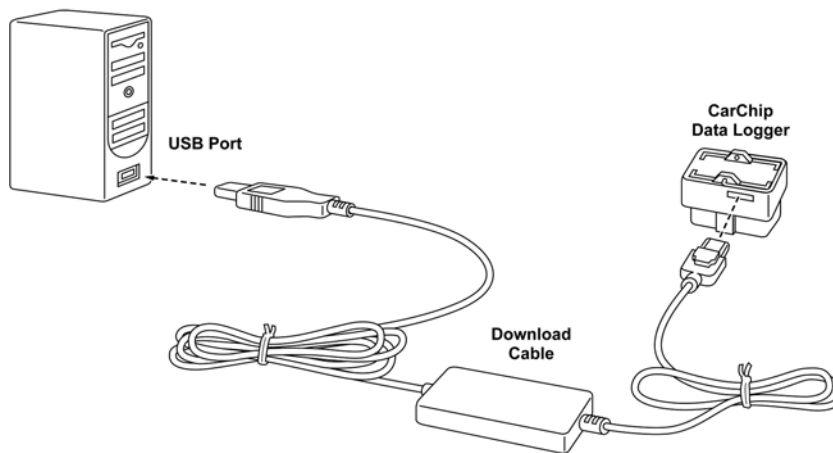


1. Connect the DB9 connector to a serial port on your computer.
2. Connect the free end of the cable to the DriveRight console.

After you have installed DriveRight FMS, be sure to test communications between the DriveRight console and the computer. Refer to page 8 for instructions.

## Connecting CarChip to Your PC

Connect the CarChip to a serial port on your PC using the hardware and cable as shown below.



1. Connect the USB connector to a free USB port on your computer.
2. Connect the free end of the download cable to the CarChip.

After you have installed DriveRight FMS, be sure to test communications between the CarChip and the computer. Refer to page 8 for instructions.

## Before You Install the Software

Before you run DriveRight FMS for the first time, you must first decide which database to use with the software. There are also software concepts you should become familiar with, and some initial planning considerations you should think about.

### Database Selection Guidelines

Here are some basic considerations for selecting your database.

## Before You Install the Software

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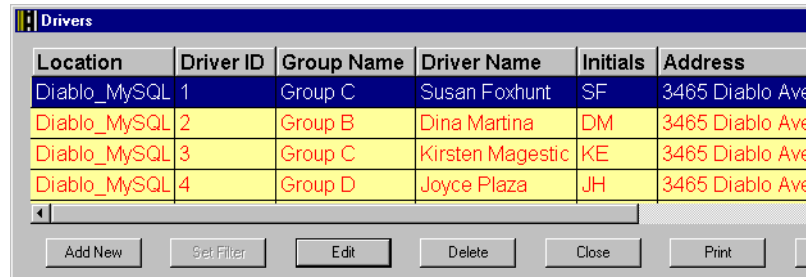
Note: Please refer to the "DriveRight Fleet Management Software Database Selection Guide" for information on selecting and installing a database for use with DriveRight FMS.

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- MS Access and MSDE are included with DriveRight FMS and require no additional purchase or setup to use. Access and MSDE are recommended for single-user installations with a fleet of no more than five vehicles.
- Either MySQL, MS SQL Server, or Oracle should be used for installations with multiple users, larger fleets, or for installations with multiple vehicles logging GPS data.
- To use MySQL, MS SQL Server, or Oracle, you must purchase the software and install it before running DriveRight FMS for the first time.

### Key Concepts: DriveRights, CarChips, Vehicles & Drivers

Your database is a collection of related tables (relational database) that contain information about your fleet (drivers, vehicles, DriveRights, CarChips, addresses, etc.). For example, information about a driver in your fleet will be stored in a single row in the Drivers table. Each column (or field) in a row stores an attribute about a given driver.



Location	Driver ID	Group Name	Driver Name	Initials	Address
Diablo_MySQL	1	Group C	Susan Foxhunt	SF	3465 Diablo Ave
Diablo_MySQL	2	Group B	Dina Martina	DM	3465 Diablo Ave
Diablo_MySQL	3	Group C	Kirsten Magestic	KE	3465 Diablo Ave
Diablo_MySQL	4	Group D	Joyce Plaza	JH	3465 Diablo Ave

*Drivers Table View*

Depending on your application, some tables in the database may be more important than others, but the following tables are of key importance: the Company Locations table, the DriveRights table, the CarChips table, the Drivers table, the Vehicles table, and the Trips table.

- Every record in the database includes the company location. You can only view records from one location at a time.
- The DriveRights table contains settings and calibration information about each DriveRight.
- The CarChips table contains settings information about each CarChip.
- The Vehicles table and Drivers table contain information related to your vehicles and drivers respectively.
- The Trips table contains driving information for each trip.
- View a table by selecting it in the Database Menu.



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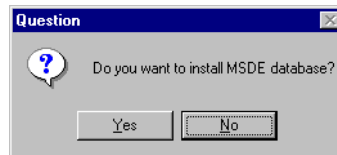
## Planning for Initial Software Use

The software allows for several layers of classification, and for different degrees of detail in accounting for driver and vehicle information. We recommend thinking about the following items so that you can tailor DriveRight FMS to your needs.

- **Define Fleets (Optional)** — If you want to track separate groups of vehicles at the same location, you can assign these groups of vehicles to different fleets. Fleets can be created when you first set up your database or can be added later at any time.
- **Define Driver Groups (Optional)** — If you want to track separate groups of drivers at the same location, you can assign these groups of drivers to driver groups. Driver groups can be set up when you first create your database or can be added later at any time.
- **Define Trip Addresses (Optional)** — You can create a list of trip addresses for frequently visited clients, delivery points, or other routine destinations.
- **Password Protection (Optional)** — Do you want to protect all or parts of the data from unauthorized viewing and alteration? DriveRight FMS password protection allows you to define each individual user's level of access to the data. If no users are defined then all users will have complete access to all software functions and to the data.

## Installing DriveRight FMS Software

1. Insert the CD. If the install program does not appear, run SETUP.EXE from the CD.
2. If you are using the MSDE database, you must click yes when prompted during the installation.



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Note: Installing MSDE adds about 10 minutes to the installation process.

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## First Time Running the Software

To start the program, double click the shortcut icon on the desktop or select DriveRight Software from the Start menu.

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Note: All software features (including many not covered here) are covered in the DriveRight FMS Help and in the DriveRight FMS User's Guide provided in the Adobe Acrobat file

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## First Time Running the Software

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“User’s Manual.pdf”. This file can be found on the install CD and in the DriveRight FMS program folder.

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Note: This manual uses the notation “Select **File>Import>Fleets...**” for menu commands. The first part of the notation (“File”) represents the menu name, the second part (“Import”) the sub-menu name (where applicable), and the final part (“Fleets”) the command name.

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### Initial Program Configuration

The first time you run DriveRight FMS, you will be required to perform the following steps to register and configure the software.

1. Enter your 8-digit registration ID code.  
A dialog box will prompt you for your 8-digit code. You can find the ID code on the software registration card and on the cover of this manual.
2. Refer to the Database Selection Guide for additional program configuration instructions.

### Software Setup

After you have finished the initial program configuration, you will want to check the program preferences and enter the default DriveRight console settings, and test the DriveRight console communications.

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Note: Please refer to the DriveRight FMS Help for more information.

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Use the following steps to set DriveRight FMS preferences:

1. Set unit preferences by selecting **Setup>Preferences>Units**. The dialog box that displays contains the following options:
  - **Unit Mode** — Specify the distance and speed units you want FMS to use (i.e. English or Metric).
  - **Date Mode** — Specify the date format you want FMS to use, including separators and leading zeros. All dates entered in FMS must follow the chosen format.
  - **Time Mode** — Specify the time format used in the software (e.g., AM-PM or 24 hour clock).
2. Use **Backup Options** to configure your backup prompt and to set the number of months of records to keep in the active database. Select **Setup>Preferences>Backup Options**. The **Backup Options** dialog box is displayed.
3. Check the **Keep \_\_\_ months of records active in database after every backup** box and determine the number of months of data to be retained in the active database.

Note: Refer to the Active Database Size Recommendations section in the DriveRight FMS Database Selection Guide or to the same section in the Quick Reference section of Help for automation option recommendations.

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4. Select **Setup>Preferences>Download Options**. The **Download Options** dialog box displays, containing the following options:

- **Synchronize time and date after every download** — This option resets the DriveRight or CarChip to the system time and date after each download. If you select this option, be sure to verify the system time and date regularly to ensure accuracy.
- 

Note: If you choose this option, all DriveRight consoles including remote units downloaded through host mode will be reset to the computer's time and date, even if the remote DriveRight is in a different time zone. Also, all CarChip devices will be reset to the system time and date.

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- **Use DriveRight ID Code as Trip Address ID or Driver ID (DriveRight 500 & 600 only)** — With DriveRight 500 & 600 you may specify a Driver ID using the code on the DriveRight.

If only one driver uses a vehicle, the code may be used as a trip address ID. To specify an ID for each trip address, select **Database>Trip Addresses...** Then, at the beginning of each trip, specify the trip address ID in the DriveRight console. When downloading a DriveRight, DriveRight FMS interprets each ID as the destination of a trip.

- **Include last \_\_ hours of speed and GPS logging** — determine number of hours of speed data the recorded by the CarChip that the FMS software keeps. To save database space, CarChip uses the default setting of 1 hour and saves the last hour of GPS and Speed Interval data that gets displayed in the GPS database table. Select this check box and enter the number of hours of speed and GPS logging data you want to keep.
- 

Note: The maximum number of hours of speed and GPS logging information that can be downloaded and stored is 9 hours. To minimize download times and limit the amount of database server space used, it is recommended that the default of one hour be used. Note that by increasing the number of hours of speed and GPS logging information that is kept increases the amount of time it takes to download information from the CarChip to the software.

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### **Default DriveRight Settings Wizard**

You can edit the default DriveRight settings using the Setup Wizard: Select **Setup>Default DriveRight Settings>Setup Wizard**.

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Note: See the DriveRight FMS Help for more information on using the Default DriveRight Settings Wizard.

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You can edit defaults for the following DriveRight settings:

- **Unit Settings** — Select the date, time and unit modes.
- **Safety Settings** — Enter the speed, acceleration and deceleration limits.
- **Timer Settings** — Enter the trip stop time and driver log out time.
- **Alarm Settings** — Select the alarm mode and options.
- **Security Settings** — Enter the security code (PIN code) and select security options.

### **Default CarChip Settings**

You can edit the default CarChip settings using the Default CarChip Settings command in the Setup Menu.

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Note: See the DriveRight FMS Help for more information on configuring Default CarChip Settings.

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You can edit the following CarChip default settings:

- Hard braking thresholds
- Acceleration thresholds
- Speed bands
- Engine data parameters
- CarChip Alarm Settings (used with CarChip Fleet with Alarm #8245)
- CarChip LED Settings

### **Considerations for Using CarChip and DriveRight Together**

- If both a CarChip and DriveRight console are installed in the same vehicle, you will need to create two entries for the driver and two entries for the vehicle in the DriveRight FMS database. Otherwise you will see duplicate trip data in your DriveRight FMS reports.
- If you are using both CarChip and DriveRight devices, make sure both types of devices use the same safety settings.
  - Speed Band 3 in CarChip should match Speed Limit in DriveRight.
  - Hard Braking in CarChip should match Decel Limit in DriveRight.
  - Hard Acceleration in CarChip should match Accel Limit in DriveRight.

### **Select Communications Port - Test Port Communications**

Use the **Communications Port** command in the **Setup** Menu for the desired device to select the COM port used to connect to a DriveRight or CarChip.

- The software supports USB and multiple COM ports.
- Use the Auto Detect button in the Serial Port dialog box to automatically detect which serial port a DriveRight is connected to and to verify communication.

Note: When using the Auto Detect feature with a DriveRight, be sure the console is connected to the computer and is active, with data showing on the LCD screen. If the screen is blank, press MODE on the DriveRight console to activate it.

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Note: Be sure to close any other applications that may be using the serial port, such as the CarChip software or Palm Hotsync Manager, before attempting to communicate with DriveRight.

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## Building Your Database

To build up your DriveRight FMS database, we recommend adding drivers first, then adding vehicles, and finally adding DriveRights and/or CarChips.

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Note: Refer to the DriveRight FMS Help for more information about building your database.

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Note: If you are importing data from an earlier version of DriveRight software, please see "Importing Data from DriveRight 2.x" on page 11.

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1. **Add Drivers** — Add drivers to your database using the Add New command in the Drivers browse window: Select **Database>Drivers>Add New**.
  2. **Add Vehicles** — Add vehicles to your database using the Add New command in the Vehicles browse window: Select **Database>Vehicles>Add New**. When you add a vehicle, you will need to select a default driver for it from the list of drivers. If you do not have a default driver to assign to this vehicle, select UNALLOCATED DRIVER.
  3. **Add New DriveRights** — Add DriveRight consoles to your database using the Add DriveRight Wizard in the DriveRight Menu: Select **DriveRight>Add New DriveRight**. When you add a DriveRight, you will need to select the default vehicle for it from the list of vehicles. If you do not have a default vehicle to assign to this DriveRight, select UNALLOCATED VEHICLE.
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Note: If you are using GPS with your DriveRight 600, activate the GPS module using the GPS Settings command: Select **DriveRight> DriveRight Settings>Setup GPS**.

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4. **Add New CarChips** — Add CarChip devices to your database using the Add New CarChip command in the CarChip Menu. CarChips must be assigned to either a vehicle or a driver.

## Downloading Data

Once the software has been configured, the data connection to the computer has been established, and the CarChip or DriveRight has been added to the database, you will finally be ready to download data into DriveRight FMS.

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## Calibrating DriveRight Consoles

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To download data:

1. Connect the CarChip or DriveRight to the computer.
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Note: The DriveRight console must be active (LCD screen display on) to download data. Press MODE on the console if the LCD is blank.

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2. Click DriveRight>Download to download a DriveRight console or Click CarChip>Download to download CarChip. You can also download using the DriveRight and CarChip download icons in the toolbar.

*Download  
DriveRight  
Icon*



*Download  
CarChip  
Icon*



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Note: The optional DriveRight Palm Download Kit (# 8181) allows you to transfer data from a DriveRight console to a Palm PDA, then download the data from the Palm into DriveRight FMS. The SmartCard system (#8104, 8108, 8112) allows you to transfer data from a DriveRight to a computer through a SmartCard.

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## Calibrating DriveRight Consoles

A DriveRight console must be properly calibrated to accurately record trip information. The DriveRight User's Guide includes information on calibrating a DriveRight console in the vehicle. You can also calibrate a DriveRight console using the FMS if you have some basic information about the vehicle.

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Note: CarChips receive vehicle speed from the OBDII computer and do not require calibration.

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## Additional Software Topics

Once you begin collecting data, you can use DriveRight FMS to record, report, filter, export and import DriveRight data. The following topics provide a brief overview of some FMS features. Be sure to review the documentation listed on page 2 for a complete description of FMS features and commands.

### Backup and Restore

Use the Backup command to create backups of your DriveRight FMS data. The automation options located in the Preferences menu allows you to limit the amount of data remaining in your active database after a backup. We recommend monthly backups that keep a limited number of months data in the active database.

### Reporting

The reporting tools are perhaps the most valuable aspect of DriveRight FMS for vehicle managers and administrators. You can track and compare drivers and vehicles by fleet, group or location and see critical information at a glance. The Driver Performance Score report provides a powerful tool for monitoring

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your drivers performance. Use FMS exception reports to quickly highlight instances of excessive speed, hard braking, and hard acceleration.

### **Importing Data from DriveRight 2.x**

A separate conversion utility, OldToNew, has been included with the DriveRight FMS software to allow the conversion of existing DriveRight 2.x database files for use with DriveRight FMS.

- This conversion process can take a fairly long time, depending on the size of your 2.x database.
- Only data in the active database of the 2.x software will be converted.
- This conversion utility can only be used with databases created by DriveRight 2.04, 2.05, 2.06 or 2.6. If you are using an earlier version of the DriveRight software you must first upgrade to one of the supported versions.

Use the following procedure to convert your existing DriveRight database for use with DriveRight FMS:

1. Install and run DriveRight FMS before you convert your data to the new format.
2. Verify the current location in DriveRight FMS using the Current Location command in the Setup Menu.

This location information will be associated with all 2.x data when converted into the new database format.

3. To import data to a new location, select the Company Locations command in the Database Menu in DriveRight FMS, then click the Add New button in the Company Locations browse window.
4. Go to Startup>Programs>DriveRight and run OldToNew.
5. To import data, select the location from the drop down list.
6. Click the Browse button to select the old Borland tables directory (By default it is C:\Program Files\DriveRight Software\tables).
7. Click the Convert button to start the conversion.

After the data is converted you will see a success message. At this point all of your 2.x data has been converted into the new DriveRight FMS database format.

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Note: The conversion process may take a long time depending on the size of your 2.x database. While you can interrupt the conversion at any time by clicking the stop button, this is not recommended.

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8. Be sure to check the data conversion by opening DriveRight FMS and viewing various tables using the Database Menu commands.

Contacting Davis Technical Support

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## Contacting Davis Technical Support

If you have questions about the software, or encounter problems installing or using the software, please contact Davis Technical Support. Most questions can be answered on the phone.

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Note: Sorry, we are unable to accept collect calls.

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

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

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

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

**www.davisnet.com** – Product documentation is available on the DriveRight Support section of our website. Watch for FAQs and other updates.