PROGRAMMER'S REFERENCE LIBRARY

7864

COMPUTER

The Programmer's Reference Library is an array of solutions that enables developers to incorporate weather station data into customized applications. It contains documentation and development tools that permit users and third party developers to write applications for Davis weather instruments and WeatherLink hardware. The contents of the Library are offered **free of charge** as a service to Davis' customers and partners and are available for immediate download on the Davis website (http://www.davisnet.com/support/download). New versions are released periodically, check the website for the latest version.

PRODUCT INFORMATION

Contents

The Programmer's Reference Library contains:

- **WeatherLink for Excel API**

  An Excel development environment that automates the download of weather station data into Excel workbooks. For use with Monitor II, Wizard III, Wizard II-S, Perception, and GroWeather stations. This solution supports the development of Excel-based modeling applications (such as IPM, HVAC, home automation, or irrigation). Requires WeatherLink or GroWeatherLink data logger (#7862 or #7871) and Microsoft® Excel 97. For more information on this solution, send email to api@davisnet.com.

- **WeatherLink DLL**

  A dynamic link library for use with Monitor II, Wizard III, Wizard II-S, and Perception stations. The 32-bit DLL permits direct communication with the WeatherLink hardware by providing routines necessary for communicating via the PC's RS-232 serial port. For use on Windows 95, 98, and NT platforms. This solution also offers documentation assistance on how to use and operate the DLL, as well as supplementary source files for the DLL. Requires WeatherLink data logger (#7862).

- **GroWeatherLink DLL**

  A dynamic link library for use with GroWeather stations. See the WeatherLink DLL description above for more information. Requires GroWeatherLink data logger (#7871).

- **Communications Protocol Documentation**

  A description of commands and functions that permit communication with all Davis stations, including the Health EnviroMonitor and Energy EnviroMonitor. The documentation includes the source code for a simple 16-bit Visual Basic program as an example. This solution is provided for systems, stations, and applications <u>not</u> supported by the above DLLs. For example, this solution enables UNIX, Macintosh, 16-bit Windows, or DOS applications; Health and Energy EnviroMonitor applications; and applications that require different serial port protocols. Requires the appropriate WeatherLink data logger.

Control Functions

Each of the above solutions gives developers access to a number of station/sensor control functions via the WeatherLink:

Control Functions Available	Set Archive Interval, Set Calibration Numbers, Set Alarm Thresholds and Time, Clear Total Values, Set Time and Date, Set Degree-Day Thresholds (GroWeatherLink & Energy WeatherLink only), Control Two Outputs of the Alarm Output Module (GroWeatherLink & Energy WeatherLink only), Set Auto Clear (GroWeatherLink, Energy & Health WeatherLinks only).
Archive Download	Archived data may be transferred from the WeatherLink to the computer as often as desired. Automated download function is programmable.
Current Data Download	Current sensor data may be transferred from the station to the computer as often as desired. Automated download function is programmable.

Communication Protocol

Each of the above solutions incorporates the following:

Data Channel Characteristics	1200 or 2400 baud (switch-selectable), RS-232, half-duplex, data only (no CTS or RTS).

See the appropriate WeatherLink specifications for more information.