



# Kestrel® Interface

Upload Software Instructions, Version 1.7

Thank you for purchasing the Kestrel Interface and Upload Software. This system will upload the stored data from your Kestrel 4000 Pocket Weather Tracker to a PC for long-term storage, in-depth analysis or detailed charting.

## Before Starting

What's in the Box:

- Interface Cradle- Kestrel snaps into the cradle and communicates optically.
- Serial Cable- plugs into the interface and an available serial port in your PC.
- Tripod Standoff- screws into the bottom of the interface to attach to a tripod. The thread is loose for adjustability.
- Disk or CD - upload program that pulls the data from the Kestrel to a comma-delimited text file.

What You'll Need:

- a PC with an available serial port
- Windows 3.1 or higher
- a Kestrel 4000 Pocket Weather Tracker

## Connecting

How to Connect the Interface:

- Plug the end of the serial cable with the pins into the connector on the interface.
- Plug the end of the serial cable with the sockets into the serial port on the PC.

How to Mount on a Tripod:

- Screw the bolt on the standoff into the nut in the interface.
- Screw the bolt on the tripod into the nut in the standoff.

How to Mount the Kestrel 4000:

- Place the Kestrel 4000 into the cavity of the interface such that the bottom of the Kestrel is closest to the serial cable. The Kestrel should be facing up, so the display is visible. The lanyard will fit in a slot in the interface, and does not need to be removed for uploading.
- Tripod Mount - pull the elastic strap over the Kestrel to hold it on the interface.

## Installing Software and Com Port Setup

How to Install the Software:

- Create a subdirectory called "Kestrel" on your hard drive. This directory will be used for the application and data files.

- Run "Kzip1\_7.exe" from the included disk or CD. This is a self-extracting zip file, which will extract the required files to a specified location on your hard drive.
  - Comdef.ini
  - Kstrl1\_7.exe
  - Tb510.dll
  - Xnmba420.dll
  - Xnmte420.dll
- It is important to keep all five files in the same directory. The software will not run otherwise.

How to Set the Com Port

- The default setting for the com port is com1. If the serial cable is connected to a different com port, the setting will need to be changed.
  - Open the file "comdef.ini" in any text editor. The com port setting is written in this file. Simply change the number to the appropriate com port value and save the file.
  - The upload application may need to be restarted if it has already been opened.

## Uploading Data

How to Use the Software:

- Simply double click "Kstrl1\_7.exe" to start the software. A splash screen will appear, with instructions to press any key to continue.
- The software's primary function is to upload stored data from a Kestrel Meter. The software is also able to perform some configuration functions.

Communicating with the Kestrel:

- The menu called Communicate contains all of the interfacing functions: Upload Data Log, Clear Data Log, Restore Units Defaults, Restore Pressure Cal, Properties/Identification.
- Before communicating with the Kestrel, check the following:
  - the serial cable is properly connected to the computer and interface,
  - the proper com port is specified,
  - the Kestrel is properly mounted on the interface,
  - the Kestrel is turned on.

How to Upload Data from the Kestrel:

- Select Upload Data Log from the Communicate menu.
- The software will attempt to communicate with the Kestrel. It may take approximately 4 seconds to establish a connection.
  - If the connection was not successful, check the instructions for communicating with the Kestrel.
- Select a file name and location. The file will be saved in a comma separated values format (csv). The default name is formatted for the current date (yyyymmdd.csv). The default directory is called "data" and is automatically created within the main software directory.

- The data will be displayed on the screen as it is uploaded. The upload may take up to 2 minutes, depending on the amount of data.
- After upload is complete, a text file is automatically created in order to store notes pertaining to the uploaded data. Select a file name and location. The file will be saved in a text format (.rem). The default name is the same as the data file. The default directory is "data".
- Write up to 99 lines of notes in the remarks file. A carriage return on a blank line will indicate the remarks are complete.
- The data will remain available on the screen for review.

## Settings

How to Perform Other Communication Tasks:

- Communicate|Clear Data Log – clear all of the data on the Kestrel.
- Communicate|Restore Units Defaults – reset the units of measure on the Kestrel to either metric or imperial default settings.
- Communicate|Restore Pressure Cal – reset the pressure sensor calibration to the factory setting. This should only be used if the pressure calibration setting on the Kestrel was incorrectly set.
- Communicate|Properties/Identification – display certain properties of the Kestrel for diagnostic purposes.

## Sample Screen Shot

FORMATTED DATE-TIME	WS	TP	WC	RH	HI	DP	WB	BP	AL	DA
2000-04-24-00:01:00	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:05	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:10	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:15	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:20	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:25	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:30	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:35	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:40	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:45	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:50	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:01:55	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:00	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:05	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:10	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:15	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:20	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:25	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:30	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:35	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:40	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:45	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:50	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:02:55	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70
2000-04-24-00:03:00	0.0	70.0	70.0	100.0	48.0	41.0	50.0	30.00	-3000	0.70

How to Open Previously Saved Files:

- Select Open from the File menu.
- Browse the computer for the desired file.
- The data will be displayed on the screen.

How to View Data from an Opened or Uploaded File:

- Select View from the File Menu.
- Data from the current file will be displayed.

How to Set Printer Options:

- Select PrinterSetup from the File Menu.
- Configure the printer and associated options as necessary.
- **Set the Paper Orientation to Landscape.**

How to Print the Data:

- Select Print from the File Menu.

How to Exit the Program:

- Select Exit from the File Menu.

Heading	Description
FORMATTED DATE-TIME	Formatted Date, Time *YYY-MM-DD-HH:MM:SS
DT	Unformatted Date, Time * seconds since Jan 1, 2000 00:00:00
WS	Wind Speed
TP	Temperature
WC	Wind Chill
RH	Relative Humidity
HI	Heat Index
DP	Dewpoint
WB	Wet Bulb Temperature
BP	Barometric Pressure
AL	Altitude
DA	Density Altitude

\* Units of measure will match setting in Kestrel 4000.



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