

## ACS2002 PC Software Instructions

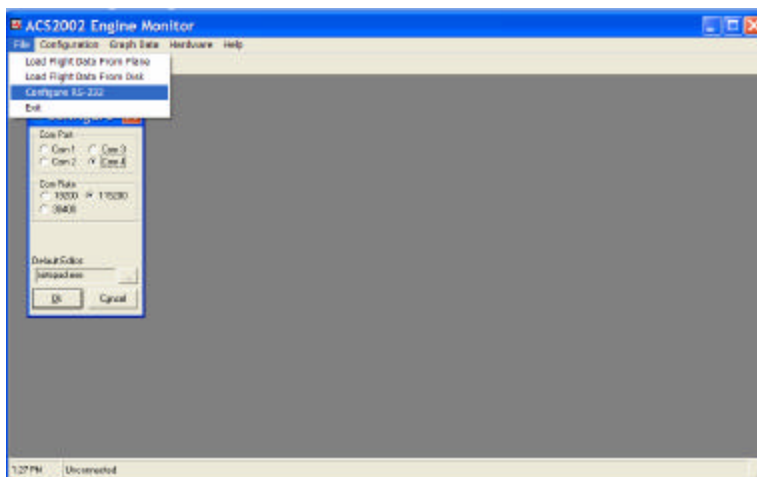
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### PC Software Installation

Before you can reprogram the ACS2002 Engine Monitor or capture data you will need to install the software “ACS2002 PC.exe” on a PC with a Serial Port. The latest software is available from [www.Advanced-Flight-Systems.com](http://www.Advanced-Flight-Systems.com) After downloading and running the self extracting executable you will need to run Setup.EXE to install the software. The software has been tested on the following operating systems:

- Windows 98
- Windows 2000
- Windows XP

After you install the software for the first time you will need to select: **File** then **Configure RS-232** so that you can select the serial port number on the PC that you have plugged the communication cable into (COM1-COM6).

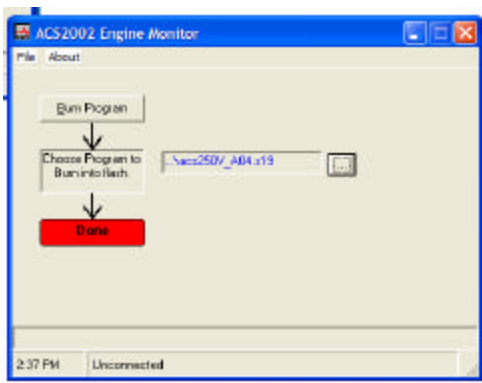
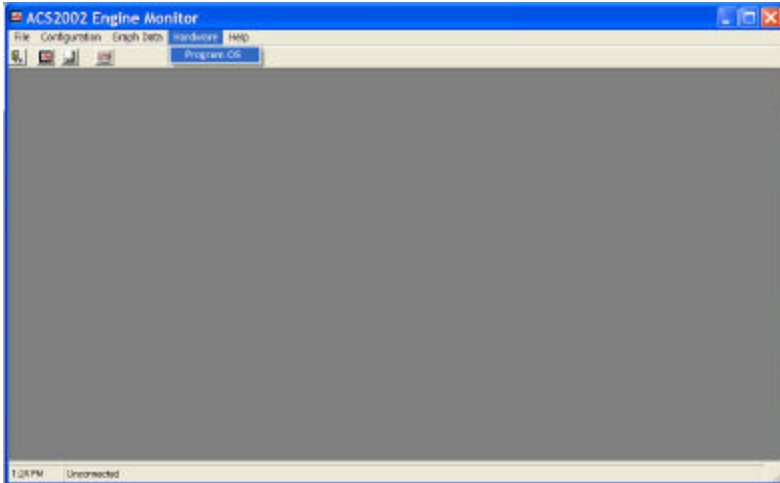


*Also select 115200 for the Com Rate*

# Updating ACS2002 System Firmware

The latest firmware is available from [www.Advanced-Flight-Systems.com](http://www.Advanced-Flight-Systems.com)

## ACS2002 Flash Programming



1. After starting the ACS2002 PC program select **Hardware** and **Program OS** from the menu bar. you will need to select the file to be installed on the engine monitor. You select the file by clicking on the button with the ... on it next to the last file name programmed. The file that contains the software will be one of the following name formats: This file should be placed in a directory that you can find from the CD or EMAIL.

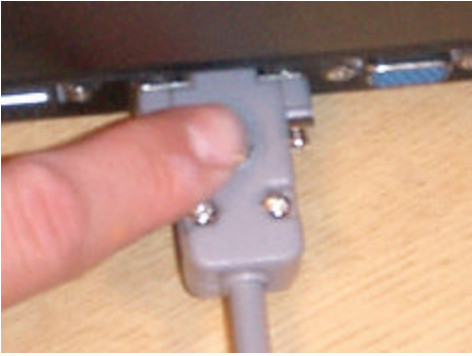
acs???H_A03.s19	Horizontal Mounting,	A03 Hardware
acs???V_A03.s19	Vertical Mounting,	A03 Hard ware
acs???H_A04.s19	Horizontal Mounting,	A04 Hardware
acs???V_A04.s19	Vertical Mounting,	A04 Hardware

- ? Where ??? is the version number of the software to install
- ? You can find the hardware version of your system on the “TIME” screen on the engine monitor. If you system does not show A04 in the time screen then it is an A03.

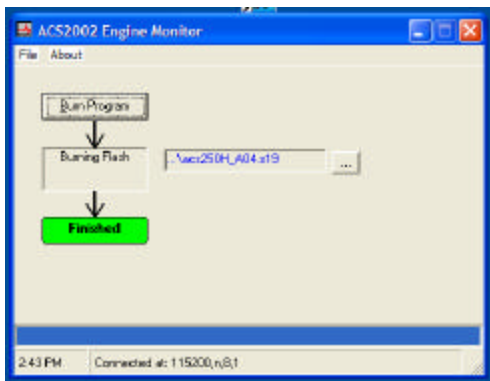
2. Plug the programming cable into Port 3 on the back of the engine monitor.



3. Plug the other end of the programming cable into you PC serial port.



4. Hold the button down on the programming cable and turn on the ACS2002 Engine Monitor. The screen should stay blank on the ACS2002, if it turns on try it again.



5. Click on the **Run Program** button. The PC should start programming the ACS2002 engine monitor and the blue progress bar should start to fill. The bottom box should turn green when the new program has been installed and change to **Finished**.

6. Turn off ACS2002 engine monitor.

7. Turn On the ACS2002 engine monitor in calibration mode (hold down Button 4). You should always go into calibration mode after installing new software.

8. Press **RETURN** (button 1) to exit the calibration mode and start the system.

## Down Loading Flight Data

The ACS2002 Engine Monitor captures all data every 5 seconds and stores the last 2 hours of data in memory. The ACS2002 PC software will enable you to easily transfer the captured data from the engine monitor to a PC.

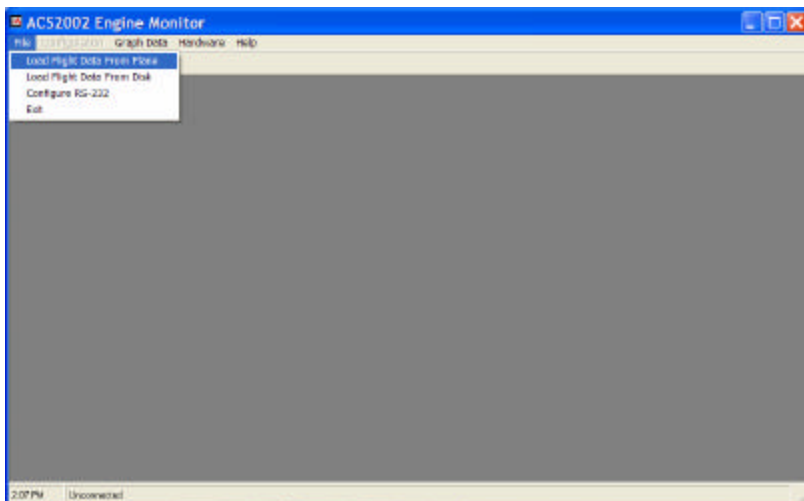
1. Plug the programming cable into Port 3 on the back of the engine monitor.



2. Plug the other end of the programming cable into you PC serial port.



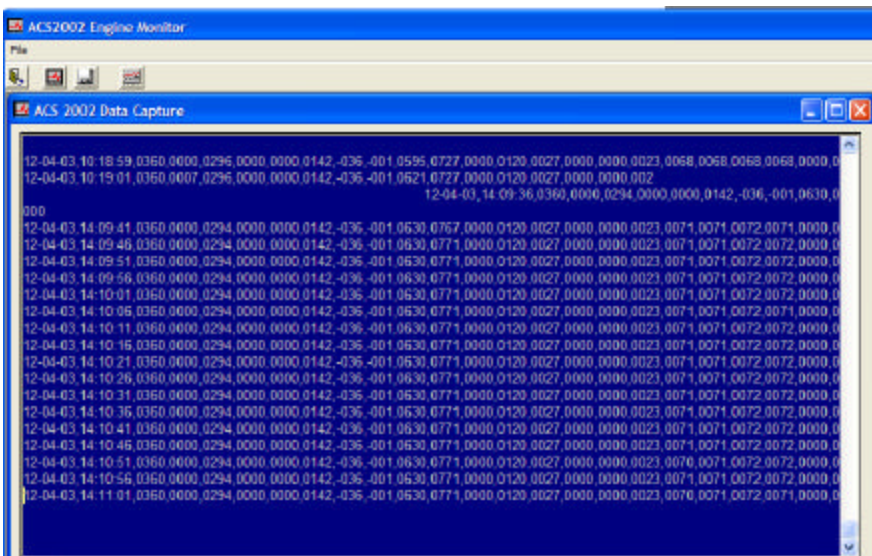
3. Select “Load Flight Data From Plane” from the File Menu or ACS2002 Icon.



4. Turn On the ACS2002 Engine Monitor (DO NOT press the button on the cable). Verify that you are getting data from the engine monitor. The terminal window on the PC should have a new line of data every 5 seconds.

If you are not getting data try the following:

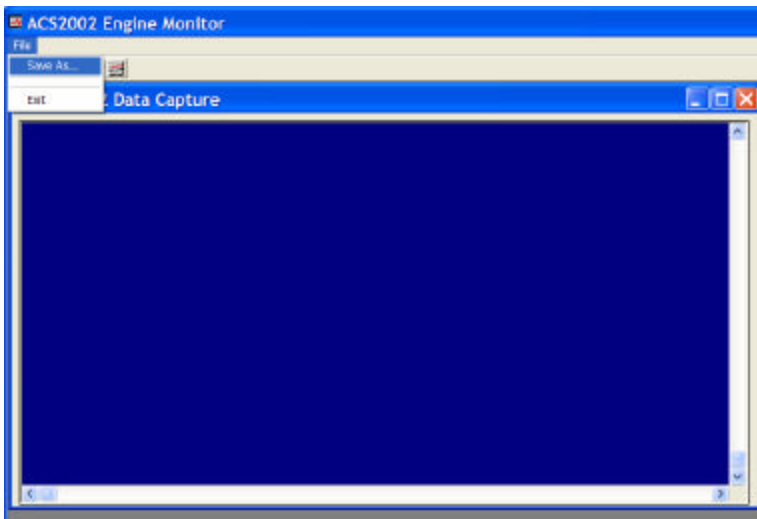
- a. Do you have the correct serial port selected on the PC?
- b. Have you plugged the cable in correctly?
- c. Is the ACS2002 on?



5. On the ACS2002 select the following:
  - a. **TIME** Button 1
  - b. **DATA** Button 4
  - c. **DOWNLOAD** Button 3

The ACS2002 should now stop sending data every 5 seconds.

6. On the PC select **Save As** from the File Menu and enter a file name to use.

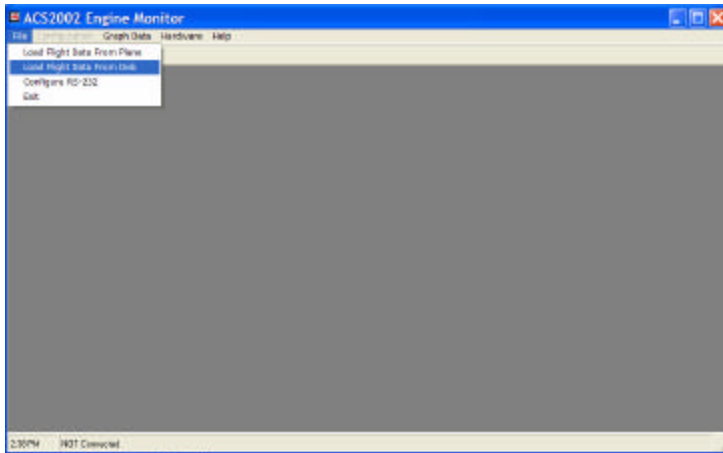


7. On the ACS2002 select the following:
  - a. **START** Button 3
  - b. The data should immediately start sending
  - c. Once the ACS2002 displays 100% all data has been sent
  - d. Select **RETURN** Button 2 on ACS2002

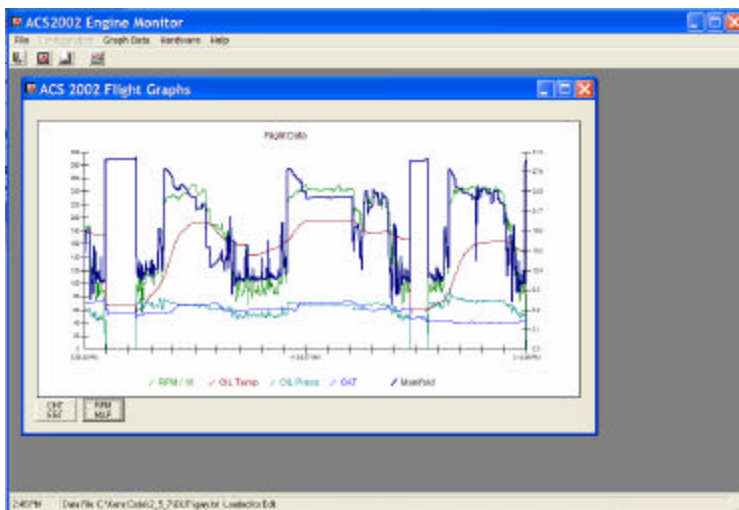
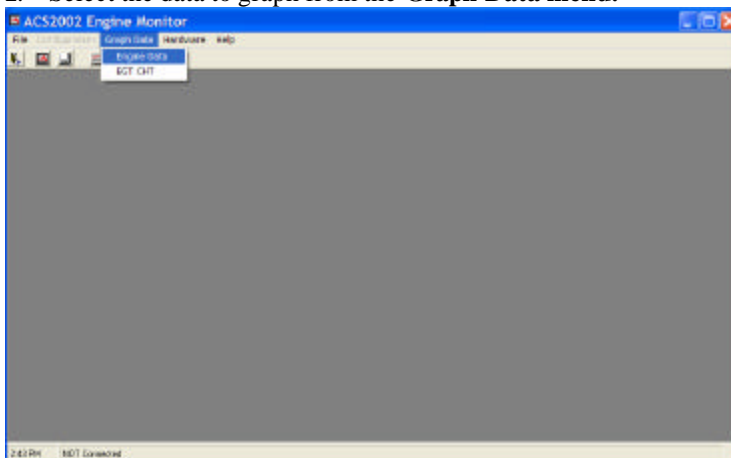
## Graphing Flight Data

The ACS2002 PC program has a very simple graphing function that can be used to display the data. If you wish to have any detailed analysis we recommend using Microsoft Excel.

1. Select **Load Flight Data From Disk** from the File Menu. Select the file that you saved the data to.



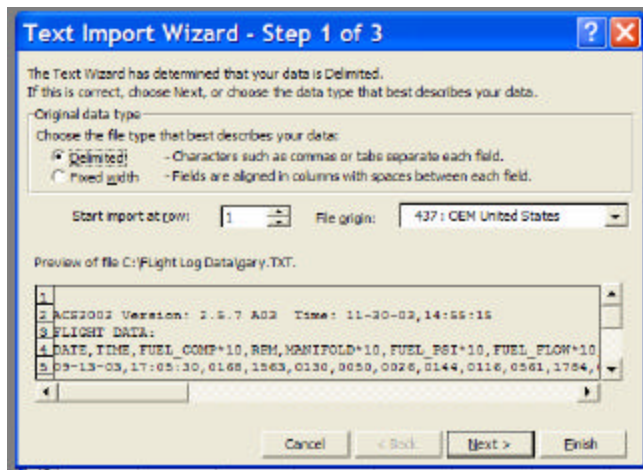
2. Select the data to graph from the **Graph Data** menu.



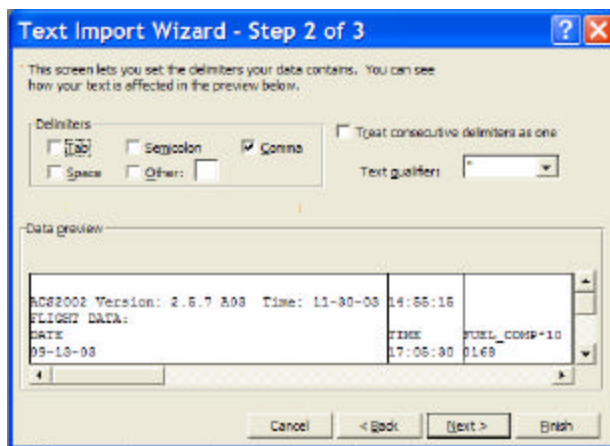
## Importing Flight Data to Excel

Once you save data from the ACS2002 Engine Monitor you can import the data into Excel by the following procedure:

1. From Excel select **File Open**
2. Change the file type to All Files (\*.\*)
3. Select the file that you saved the data to.
4. The Text Import Wizard should start and press Next



5. Select the Delimiters – Comma and then press Finish



6. The data should now be displayed in an Excel grid.

Please call if you should have any problems, we are here to help.

**Advanced Flight Systems Inc.**  
**(503) 598-7727**  
**[www.Advanced-Flight-Systems.com](http://www.Advanced-Flight-Systems.com)**