

30 N. Gould Street, Suite 7491 Sheridan, WY 82801 Toll Free +1 (888) 465-8038

# How to Download Engine Monitor Data

- Garmin G1000 or Perspective
- Avidyne Entegra R9
- Avidyne Entegra/EX5000 (R8 or below)
- J.P. Instruments EDM-series engine data monitors

### Downloading Data from Garmin G1000 or Perspective

Remove the top SD card from the MFD. Take the SD card home and plug it into your computer's card reader.

Upload the data to <u>Savvy's engine monitor data analysis website</u>. If you do not already have a Savvy Aviation account, please register for one (it's free). Once logged on, click on "UPLOAD NEW" in the menu bar, click on "Add Files," and navigate to the data\_log folder on the SD card. Select the log files you want to upload. (You can also ZIP the folder and upload the .ZIP file, and it will automatically decompress and extract the files from the .ZIP archive.)

Be sure to reinstall the top SD card into the MFD before further flight.

## Downloading Data from Avidyne Entegra R9

NOTE: For Avidyne R8 or below, see next section.

You'll need a USB Flash Memory Drive ("Thumb drive") between 1GB and 8GB in capacity. Avidyne recommends using one of the three pre-formatted fobs supplied by Avidyne (marked with the Avidyne logo printed on one side). You can purchase additional fobs from Avidyne for a nominal fee. Acceptable alternatives are USB drives manufactured by PNY and formatted in FAT32 format (not FAT or FAT16 or NTFS). The USB drive should be completely empty. To dump your engine data:

- Power up the MFD.
- Insert the formatted empty USB drive into the MFD's front panel USB socket.
- Go to the "SYS" page and navigate to the "Get Logs" tab.
- Choose either "Full" or "Since Last Export" softkey. The second option downloads only data logged since the last time you downloaded. Since the logs contain a large amount of data, the second option will be a lot quicker.
- You'll see a progress bar with an aircraft symbol indicating that the download is in progress, and showing the percentage of completion. At the conclusion of the download, you should see "Completed OK." At that point, remove the USB drive from the MFD's USB socket.

Take the USB drive home, plug it into your computer. Locate the files C\_ENGINE.CSV, C\_FLIGHT.CSV, and C\_SYSTEM.CSV. **NOTE:** Only the C\_ENGINE.CSV file contains engine data that can be analyzed using **SavvyAviation's\_analysis tools**. The other two files contain aircraft position and FMS/autopilot information that has no diagnostic value.

If the C\_ENGINE.CSV file is long, you can reduce the upload time by compressing it into a ZIP file. To do this:

- Windows: Select the C\_ENGINE.CSV file; right-click on it and select "Send to > Compressed (zipped) folder".
- Mac: Select the C\_ENGINE.CSV file; Ctrl-click and select "Compress".

Upload the C\_ENGINE.CSV (or the .ZIP file you created) to <u>Savvy's engine monitor data</u> <u>analysis website</u>. If you do not already have a Savvy account, please register for one (it's free). Once logged on, click on "UPLOAD NEW" in the menu bar, click on "Add Files," and navigate to the C\_ENGINE.CSV or .ZIP file. The parser will upload the file, and if it was a .ZIP file automatically decompress it.

## Downloading Data from Avidyne Entegra/EX5000 (R8 or below)

You'll need a USB Flash Memory Drive ("Thumb drive") no larger than 2GB in capacity. You will need to format the USB drive on your computer using the "FAT" (FAT16) file system. <u>FAT32 will not work.</u> The USB drive must be completely empty. If it has any files on it, or if it's not formatted as FAT, your Avidyne MFD will not be able to dump your data onto it.

- With the MFD powered down, insert the formatted empty USB drive into the MFD's front panel USB socket.
- Power up the MFD.
- After the MFD does its self-test, it will display the following message: "Ready to Write Engine Data to Removable Media."
- Press "Proceed."
- When the data transfer is complete, the MFD will display its regular start screen.
- Turn off power to the MFD, and remove the USB drive from the MFD's USB socket.

Take the USB drive home, plug it into your computer, and upload the data to <u>Savvy's engine</u> <u>monitor data analysis website</u>. If you do not already have a Savvy account, please register for one (it's free). Once logged on, click on "UPLOAD NEW" in the menu bar, click on "Add Files," and navigate to the EngineLog folder on the USB drive. Select the log files you want to upload. (You can also ZIP the folder and upload the .ZIP file, and it will automatically decompress and extract the files from the .ZIP archive.)

## Downloading Data from J.P. Instruments EDM-Series Engine Monitors

For JPI EDM-series engine monitors that are <u>not</u> equipped with the USB option, we strongly recommend purchasing JPI's \$200 USB Download Box.

#### Using the JPI USB Download Box

- Insert the serial cable plug into the front panel of the EDM. Insert the other end of the serial data cable into the 9-pin jack on the memory box. (The serial cable is supplied with the EDM, not the memory box.)
- Turn on the power switch on the memory box; the red light on the memory box will light up.
- Insert the USB flash drive into the USB port on the memory box. The green light on the memory box will light up. If so equipped, the active light on the USB flash drive will light up.
- Put the EDM instrument in programming mode by pressing and holding both the STEP and LF buttons for five seconds until you see the word PROGRAM appear on the instrument.
- Tap the STEP button repeatedly until you see DUMP? N on the EDM display.

- Tap the LF button to select either NEW or ALL (depending on whether you want to dump all the data or just the data captured since the last download).
- Tap the STEP button to start the download.
- During the download, the EDM will display DATA DOWNLOAD MODE and the percent complete indicator will progress from 0% to 100%. The green light on the memory box should blink and the active light on the USB flash drive will blink.
- When the download is complete the EDM display will show DONE. Wait 10 seconds.
- Remove the USB flash drive from the memory box, turn

#### Using the USB Port (for instruments so equipped)

- With the EDM powered up, plug the USB flash drive into the USB socket on the instrument panel.
- Put the EDM instrument in programming mode by pressing and holding both the STEP and LF buttons for five seconds until you see the word PROGRAM appear on the instrument.
- Tap the STEP button repeatedly until you see DUMP? N on the EDM display.
- Tap the LF button to select either NEW or ALL (depending on whether you want to dump all the data or just the data captured since the last download).
- Tap the STEP button to start the download.
- During the download, the EDM will display DATA DOWNLOAD MODE and the percent complete indicator will progress from 0% to 100%. The green light on the memory box should blink and the active light on the USB flash drive will blink.
- When the download is complete the EDM display will show DONE. Wait 10 seconds.
- Remove the USB flash drive from the USB socket.

#### Serial Cable Users (see Addendum A)

#### In All Cases

Take the USB drive home, plug it into your computer, and upload the data to **Savvy's engine monitor data analysis website**. If you do not already have a Savvy account, please register for one (it's free). Once logged on, click on "UPLOAD NEW" in the menu bar, click on "Add Files," and navigate to the EngineLog folder on the USB drive. The file(s) will usually be named "Uyymmdd.JPI" where yymmdd is the date of the file. Some earlier JPI instruments generate the older .DAT format instead. Select the .JPI or .DAT files you want to upload. (You can also ZIP the contents of the USB drive and upload the .ZIP file, and it will automatically decompress and extract the .JPI or .DAT files from the .ZIP archive.)

**IMPORTANT:** Please do not upload your JPI data in any other file format (e.g., .CSV, .XLS). It must be in .JPI or .DAT format.

#### Addendum A

For those using a serial cable connected to a laptop and EzTrends software, the .jpi files are still the ones required for uploading to SavvyAviation. The EzTrends software displays the directory to which the .JPI files are downloaded on the COM Port Detection and Selection page:

COM Port Detection and Selection	_	>
Status		
COM1 COM3 COM4		
Download Save Folder		
Download Save Folder C:\Users\kurtl\Downloads		
Download Save Folder C:\Users\kurtl\Downloads Change to desired COM Port if necessary. Then Start or Cancel.		

In this folder should be the .JPI files necessary for uploading to SavvyAviation. The option to export data to .CSV files is designed for use with spreadsheet software.