

LAI-2000 Plant Canopy Analyzer Communications with HyperTerminal

LI-COR recommends using the LAI-2000 File Viewer software program (FV2000) whenever possible. If this program is not on your computer, it is available on our website at the following web address:

<https://licor.boxenterprise.net/s/qfeh8fvimxqn6tpzxda7>

After downloading and installation, the program can be run. By going to the 'File' menu and then choosing 'Acquire', the program will guide you through the data downloading process.

However, we understand that some users may need to download data via a different method. Successful communications can be accomplished with the LAI-2000 Plant Canopy Analyzer on computers with a Windows program called "HyperTerminal". This does work on newer computers (for example with Windows "XP"), although Windows Vista does not include HyperTerminal. Below is a list of the steps/procedures used to establish communications.

1. Connect the LAI-2000 console to the computer with the 2000-02 cable that came with the instrument or another LI-COR cable (p/n 392-03071). These are 'straight through' RS-232 Serial Cables.
2. Next, locate the "HyperTerminal" program on the computer. This should be under the [Start] menu -> Programs -> Accessories -> Communications -> HyperTerminal. (Different versions of Windows may have this program stored in different locations).
3. After selecting "HyperTerminal" a small message window may open up. It will ask if you want to make this your 'default' program. Answer 'no' for this.

Another new window might open, labeled "Location Information", asking for phone numbers. Press the [cancel] button to exit. Another message window may open asking to continue with the 'cancel', press [yes]. Click [OK] on the next window before the new "HyperTerminal" window opens up.

4. There should be a new window labeled "Connection Description". Enter a new Name for this connection, for example, "2000" or "licor". Then choose an Icon from the list to use and press [OK].

The "Location Information" window may open again. If so, press the [cancel] button to exit. Again, to continue with the 'cancel', press [yes]. Then click [OK] to continue.

5. A new window should open up labeled "Connect To". Leave the "Country/Region", "Area code", and "Phone Number" all blank. However, for the entry, "Connect Using:", select COM1 (or the appropriate Comm Port). The labels above should 'gray out'. Press [OK].

6. Another window will open, labeled "COM1 Properties". Change the settings to the values listed below:

- Bits Per Second - 4800
- Data Bits - 8
- Parity - None
- Stop Bits - 2
- Flow Control - None

Click on the [Apply] button after making the appropriate changes, and then press [OK] when done. The main screen of "HyperTerminal" should open and it should indicate connected in the lower left corner.

7. On the LAI-2000 console, enter FCT 31. Set the BAUD = 4800 [enter], DATA BITS = 8 [enter], PARITY=NONE [enter], and XON/XOFF = NONE [enter].
8. Next, enter FCT 33. Make sure the FORMAT=Standard [enter], then the PRINT OBS=YES [enter].
9. Open a "Capture Text" file in HyperTerminal. To do this, use the "Transfer" menu, and select the "Capture Text...." option. Name the file in such a way that it can be identified later.
10. To begin dumping the data, enter FCT 32. Choose the files to download. Pressing [enter] at either the 'FROM' or 'THRU' aborts this function, so enter actual numbers for the downloading to commence.
11. When all data has been transferred, go back to the 'Transfer' menu, 'Capture Text...', and click on the 'Stop' option. (The file need not be saved, as it has already been written to the file name and path specified in step (#5)). Then close out of HyperTerminal.

This produces a text (.txt) file that can either be imported into the 'FV2000' program, or opened in a spreadsheet program such as Microsoft Excel.