

## SOFTWARE INTRODUCTION

This program can collect data from the HD450 when the meter is connected to a PC and also download stored data from the meter's memory. The data may be displayed graphically, as text or similar programs. The major functions are listed in the main window.

The maximum number of data points is 10,000

### **System Requirement:**

Operating System: Windows 95/98, Windows NT 4.0 (or above) and XP

Minimum hardware requirements:

- PC with Pentium 90MHz or higher
- 32 MB RAM
- At least 5 MB byte hard disk space for the supplied software
- Display resolution of at least 800 x 600 with High Color (16 bit)

# OPERATION

## Initiating Communication

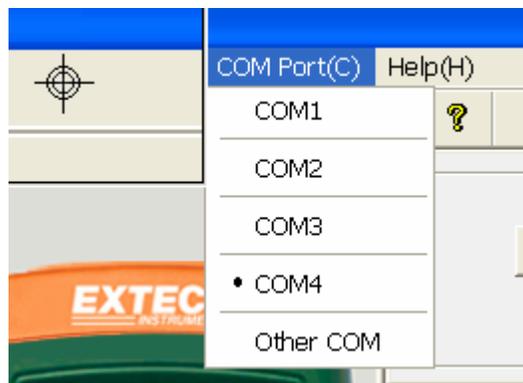
1. Turn the HD450 Light Meter ON and then connect it to the PC USB port using the supplied USB cable
2. Run the HD450 software program.
3. When communication is established, the meter's display and the virtual meter display (software window) will indicate the same value



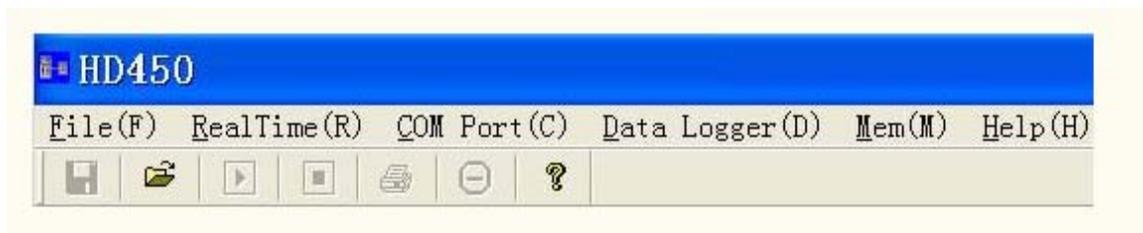
4. If communication is unsuccessful the virtual meter will display "OFFLINE"



5. If communication fails, check that the USB cable is connected correctly (replace the cable if the cable is faulty), close all other applications and then choose other serial ports from the menu until communication is successful (wait a few second after a new COM port is selected).



## Main Menu



 **Save** - Save the recorded real time data

 **Open** - Open a saved file

 **Real Time Data Run** - Begin collecting real time data

 **Stop** - Stop collecting real time data

 **Print**- Print the real time graph

 **Undo Zoom.**

 **Help document**

**Data Logger(D)** Download datalogger data form the meter

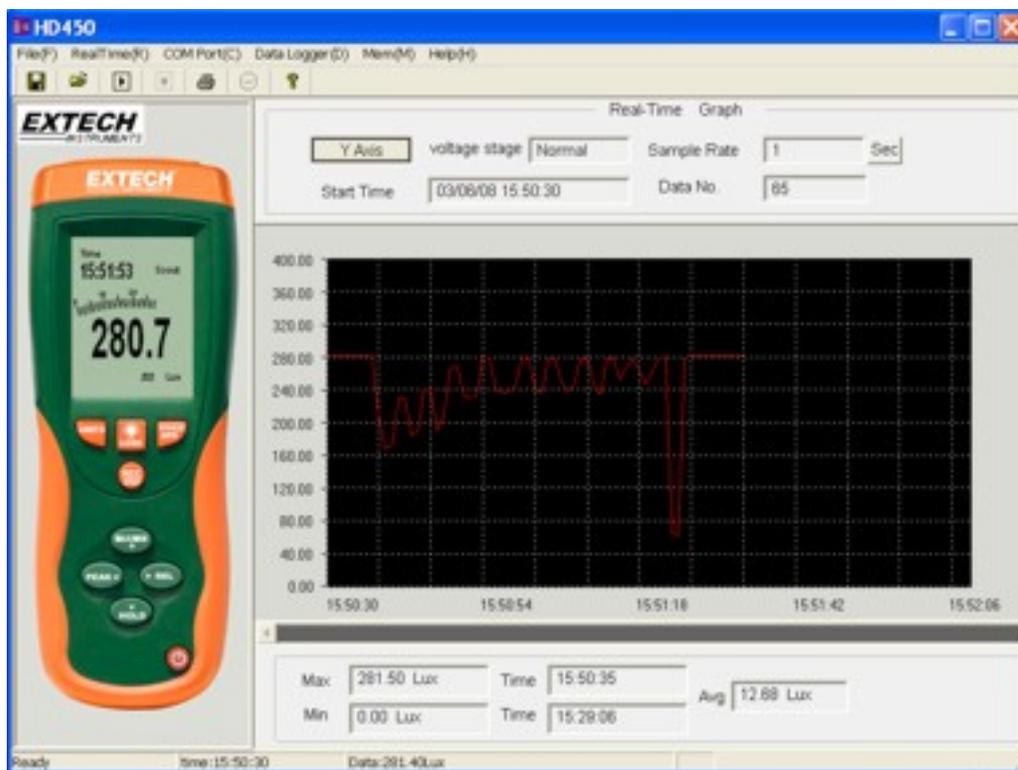
**Mem(M)** Download 99 point memory data form the meter

# Plotting Data

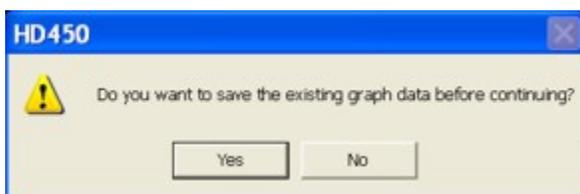
1. If communication is successful, click  The Sample Rate dialog box will appear.



2. Enter a number (1 or greater) in the edit box to set the sample rate and then click "OK". The data will begin plotting on the Real Time Graph Window

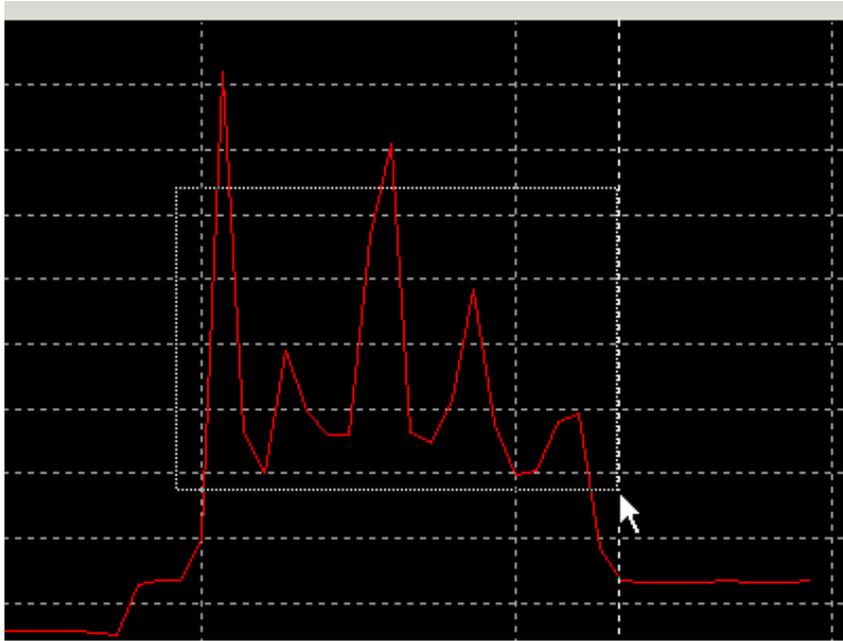


3. When a plot is stopped and another action is initiated, a request to save the plotted data will appear.



## Zoom in:

1. Press the left mouse button and drag a rectangle around the area to be expanded
2. Release the mouse button.
3. Use the scrollbar to scroll the data



**Zoom out:** Zoom out to full view by clicking 

**Y Axis Offset and Gain:** Click  to change the vertical axis offset or full scale range (gain)



**Y OFFSET And Y GAINS Setup**

Y OFFSET And Y GAINS

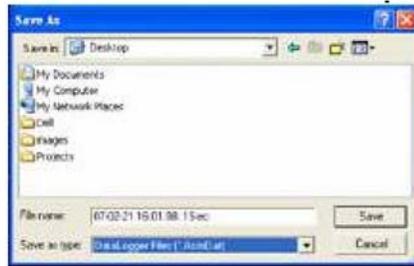
Y OFFSET(DIV)      Y GAINS/DIV

OK

**Cursor:** The vertical cursor appears at the mouse location on the graphs. The value and time of the point on the graph is displayed on the bottom of the real time graph and at the top on the recalled data graph

## Saving a Data File:

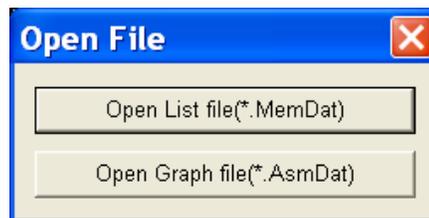
1. Click the  icon to open the file save dialog box.



2. Name the file and save it with the default extension. The file will be saved with the “.AsmDat” extension to be reopened in the HD400 program and also as a “.TXT” file (automatically saved to the desktop) to be opened in other word processing or spreadsheet programs.

## Opening a Saved Data File

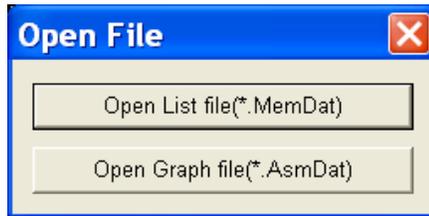
1. Click the  icon to open the “Graph” window and then click “Download” to open a saved file.



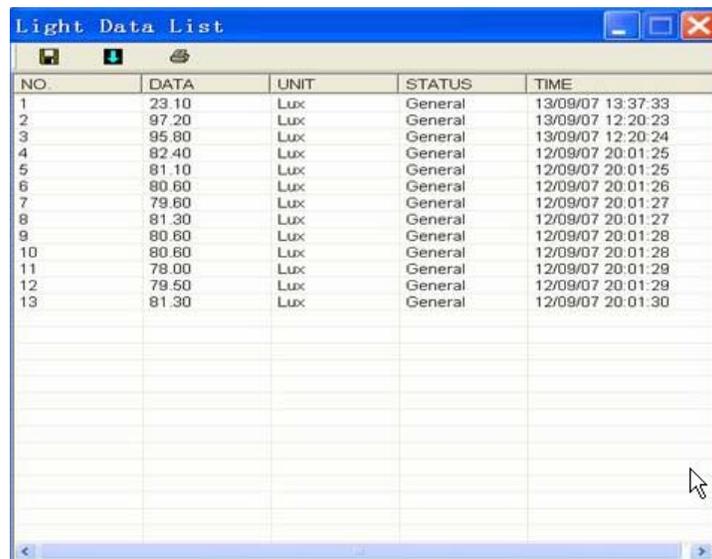
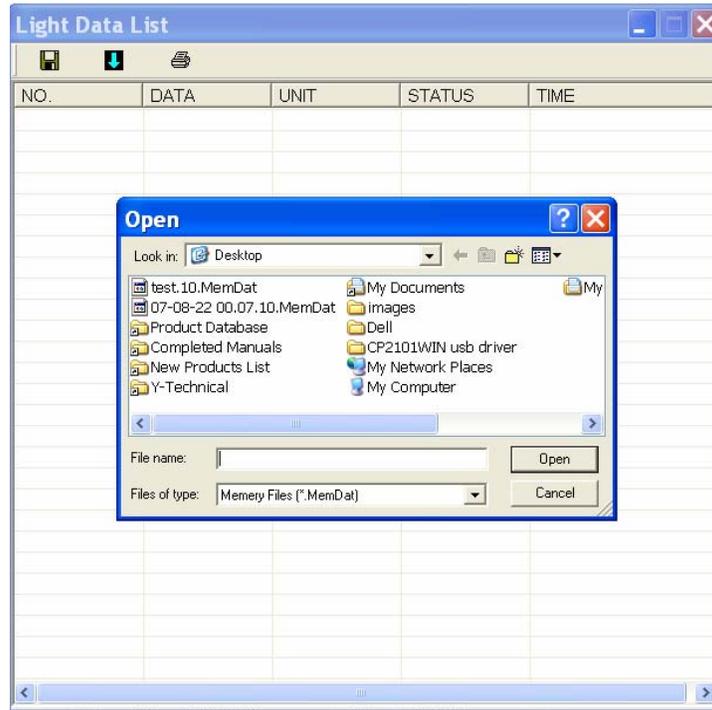
2. Click “Open Graph File” to open a \*.AsmDat file as a graph



3. The opened graph supports: Opening files, Printing, Zooming ,Y Axis Setting, and Cursor data point selection.



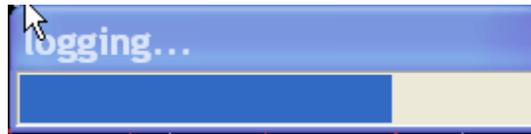
1. Click "Open List File" to open the Light Data List. Click the  icon to open the "Open" box and then select a \*.MemDat file. The selected file will open in text format.



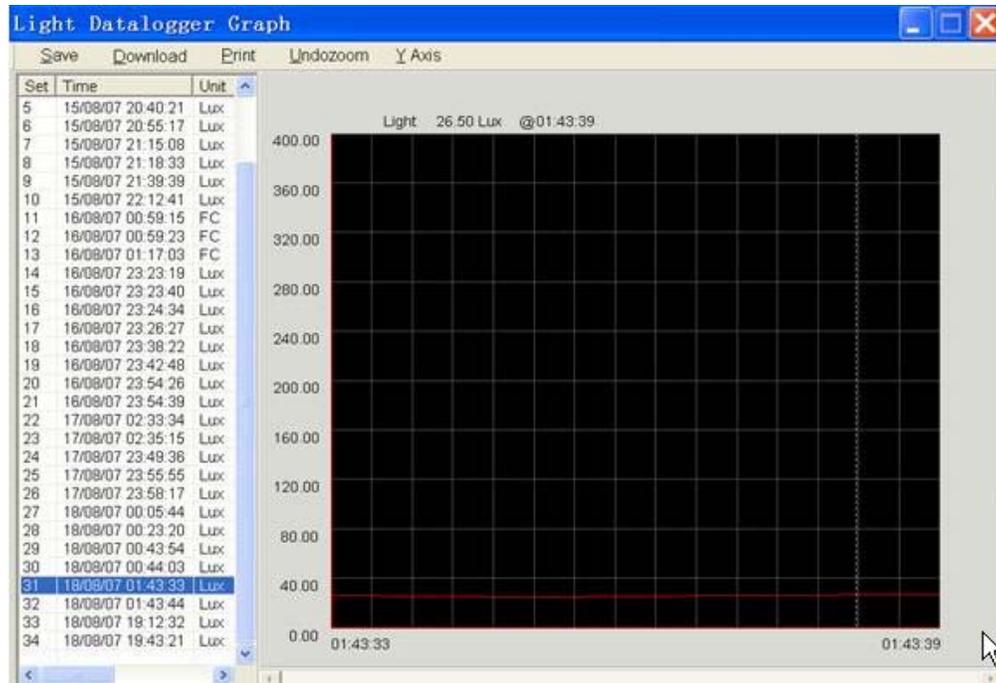
2. . The left list bar will show how many files were opened and detailed information for each file (Time, Sampling rate and data numbers of the file). You can click any list to change the graph. The opened List window supports: Opening files and Printing.

# Datalogger and Memory Download

Click “Datalogger (D) to download the Datalogging memory



1. After the data is transferred to the PC, the list on the left shows how many data sets were loaded and detailed information for each data set (Time, Unit, Sampling Rate and Record Number), Double click any list item to view the data on the graph.



2. The opened graph window supports: Saving Files, Printing, Zooming, Y Axis Adjustments and Cursor data point selection.

Click “Mem (M) to download the Memory data



1. The downloaded memory data will appear in a list box. The opened Data List window supports: Saving files, Opening Files and Printing.