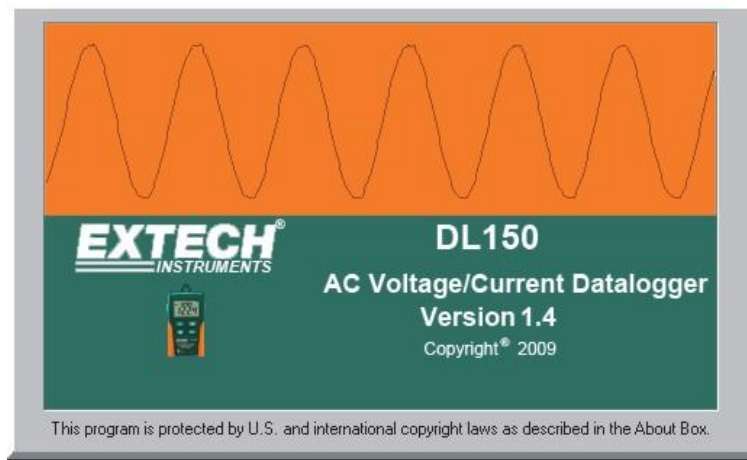


# **EXTECH<sup>®</sup>** **INSTRUMENTS** **A FLIR COMPANY**

## **DL150 Software Instructions**



The DL150 USB software is a program for downloading stored data from the DL150 when it is connected to a PC or notebook computer. The data may be displayed graphically or as a data list in Excel or similar programs. The major functions are all listed in the main window.

The maximum storage capability is 100,096 data points.

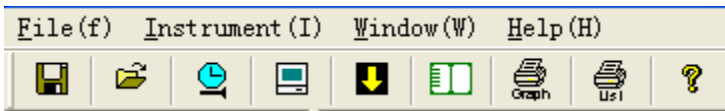
### **System Required:**

Windows 2000 or Windows XP or Vista

### **Minimum Hardware Required:**

PC or NoteBook with Pentium 90MHz or higher 32 MB RAM ;  
At least 7 MB byte hard disk space available to install Datalogger USB software.  
Recommended display resolution 1024X768 with High Color(16 bit).

# Main Menu



- **File**

**Save**-Save the recorded data to the disk.

**Open**-Open a saved file.

**Print Setup**-Change the printer and printing options.

**Print Preview**-Print preview the graph or the list.

**Print**-Print the graph or the list.

- **Instrument**

**Correct Time**-Correct the DATA LOGGER TIME.

**Datalogger Setup**-Setup the DATA LOGGER Recording Mode, Normal/Peak samprate, Auto Power off, Logging method and CAP Detection Level.

**Download Data**-Download data from the DATALOGGER .

**Import Data To List.**

**Previous Measurement**-Import the previous measurement data.

- **Window**

**Instrument**-Show or hide the instrument window.

**Info Dialog**-Show or hide the info dialog window.


- **Help**

**About**-Show the version information of the Datalogger Software.

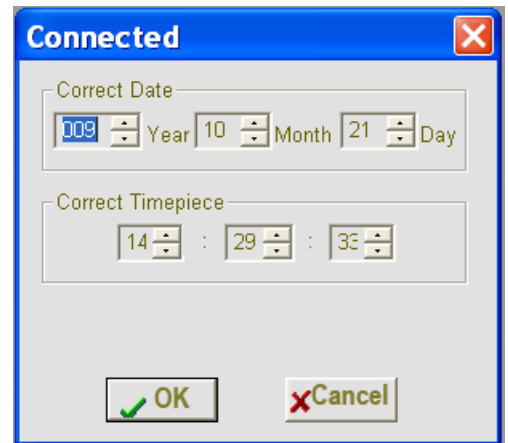
**Help Topics**-Show the software help document.

# Operation


## Correct Time

If the DATA LOGGER time is not correct, click the icon  to open the Date and Time Dialog:

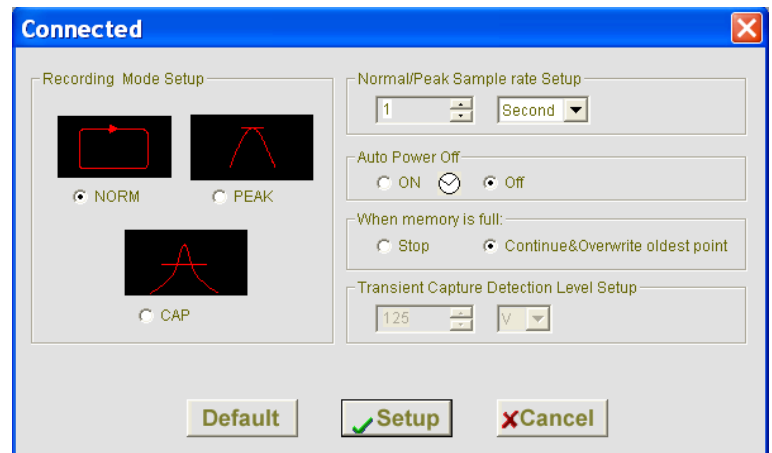
Input the correct date and time and then click the “OK” button. The DATA LOGGER time will update.



## Datalogger Setup

Click on the icon  on the menu bar. The Setup window will appear.

- The LOGGER recording mode can be set as NORM, PEAK or CAP.
- The Normal/Peak Sample rate Setup field instructs the DATA LOGGER to log readings at a specific rate. Input the desired rate in the boxes.  
This function is available at NORM and PEAK mode.
- Select Auto Power OFF ON or OFF.
- When memory is full selection sets the datalogger to either stop when the memory is full or to continue logging by overwriting the oldest data.
- Transient Capture Detection Level Setup. Enter the unit (A or V) and desired level in the boxes. The datalogger will record only when this level is exceeded. This function is only available at CAP mode.




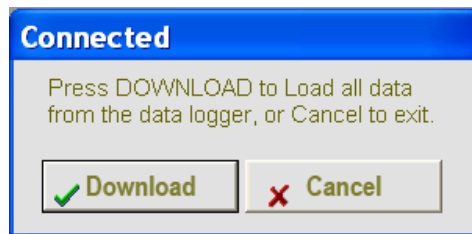
Click on the SETUP button to save changes. Press the DEFAULT button to set the Logger to factory default condition. Press the CANCEL button to abort the setup.

**Notes: Any stored data will be permanently erased when Setup is finished. To save data before it is lost, click Cancel and then download the data.**

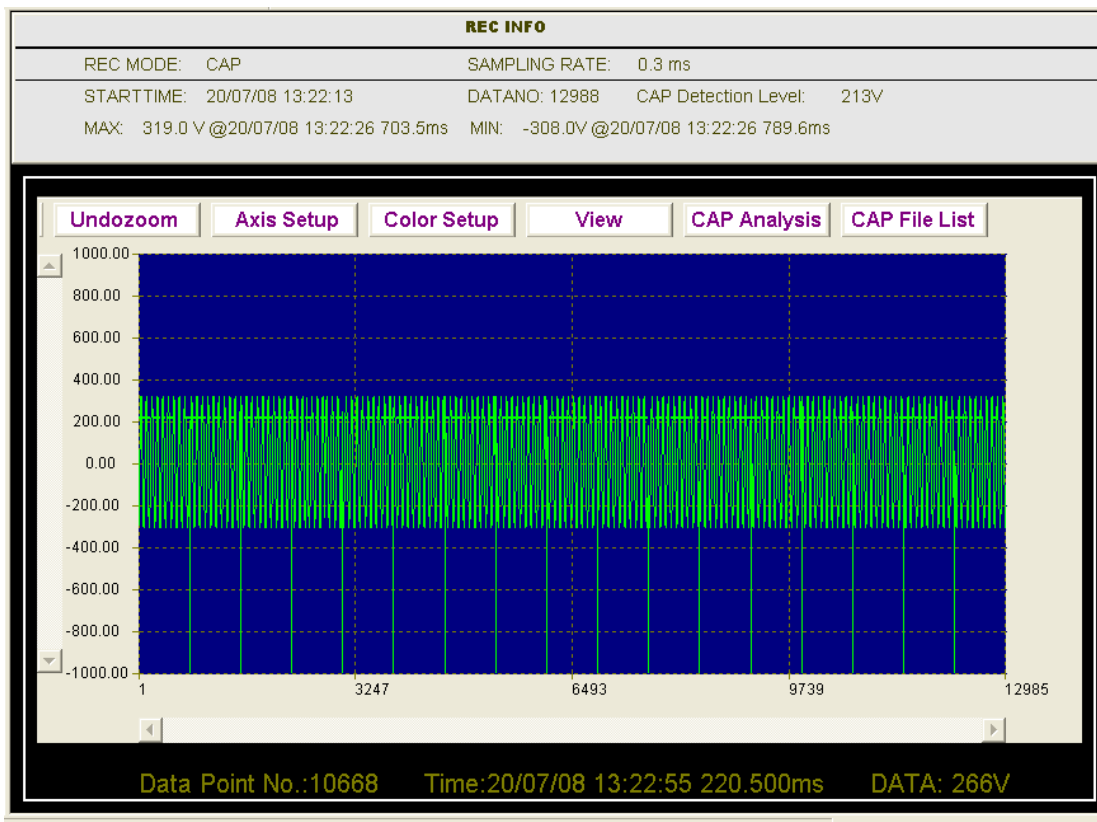
## Datalogger Download

To transfer the readings stored in the Logger to the PC:

1. Connect the DATA LOGGER to the same USB port used when the DATALOGGER was initialized.
2. Open the Datalogger software program if it is not still running
3. Click the Download icon .
4. The Window shown below will appear. Press DOWNLOAD to begin transferring readings.



If readings are successfully transferred the Data graph window will appear.



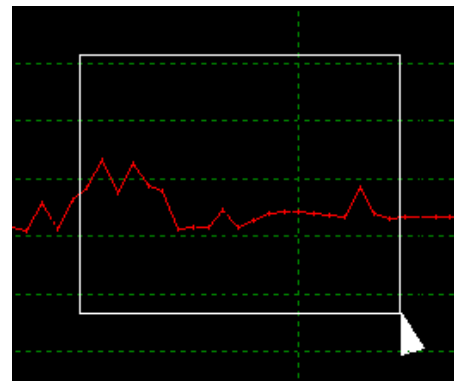
The top field show detail information of the readings(REC MODE ,SAMPLING RATE, START TIME,DATANO,CAP Detection Level, Record Max data,Min data),

## Data Graph Menu



### Zoom in:

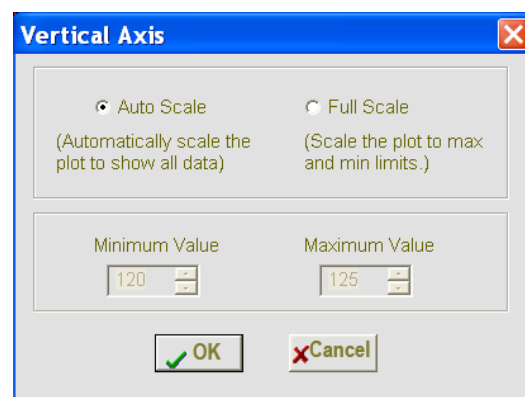
1. Press the left mouse button and drag a rectangle around the area to be expanded.
2. Release the mouse button.
3. Use the horizontal scrollbar to scroll through all the data.
4. Use the left vertical scrollbar to scroll through the data point.



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

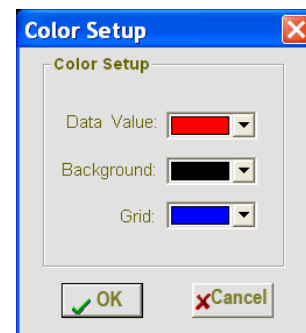
### Vertical Axis:

1. Select Auto Scale or Full Scale.
2. For Full Scale, enter the Minimum and Maximum values
3. Click OK



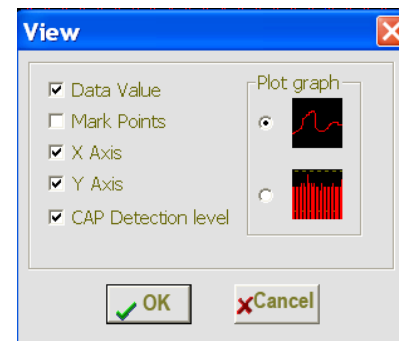
### Color Setup:

Setup the data value color, background color and grid color.



### View:

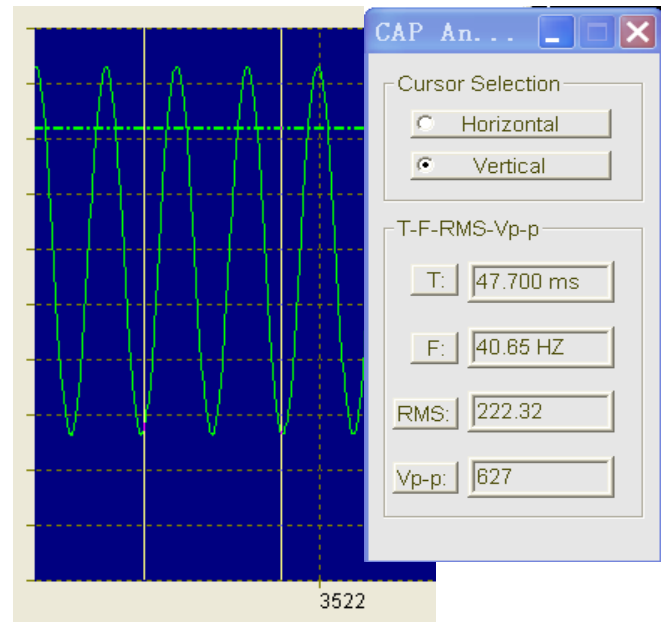
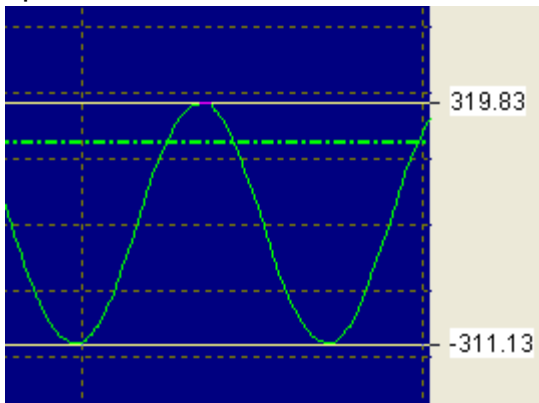
1. Select items to display including, Data plot, Data points marked, Axis and Cap set level
2. Plot as a line or bar graph



## CAP Analysis:

Analysis the time, frequency, RMS value and the Vp-p of the wave. This function is only available in the CAP mode.

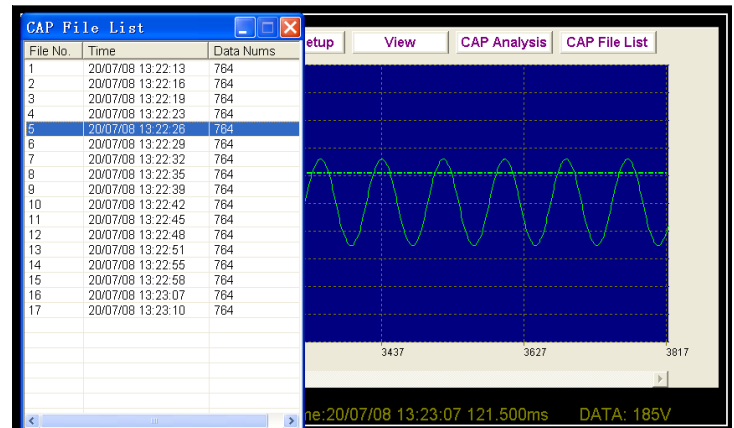
1. Select the Vertical cursor and click the right mouse button on the graph, the dialog will show the T, F, RMS and the Vp-p of this file wave graph.
2. Select the Horizontal cursor and click the right mouse button on the graph, the panel will show the specific data value at the cursor.



## Cap File List:

Get the file list of the wave graph.

Click any item in the list to get the wave graph of this file.





## Import data to list

Click the list icon  to display data as a list with time.

No.	Time	Data Value
24	10/22/09 10:55:27 5.612ms	-31 V
25	10/22/09 10:55:27 5.856ms	-17 V
26	10/22/09 10:55:27 6.100ms	-1 V
27	10/22/09 10:55:27 6.344ms	15 V
28	10/22/09 10:55:27 6.588ms	33 V
29	10/22/09 10:55:27 6.832ms	49 V
30	10/22/09 10:55:27 7.076ms	63 V
31	10/22/09 10:55:27 7.320ms	81 V
32	10/22/09 10:55:27 7.564ms	93 V
33	10/22/09 10:55:27 7.808ms	107 V
34	10/22/09 10:55:27 8.052ms	119 V
35	10/22/09 10:55:27 8.296ms	127 V
36	10/22/09 10:55:27 8.540ms	139 V
37	10/22/09 10:55:27 8.784ms	143 V
38	10/22/09 10:55:27 9.028ms	153 V
39	10/22/09 10:55:27 9.272ms	153 V
40	10/22/09 10:55:27 9.516ms	161 V
41	10/22/09 10:55:27 9.760ms	161 V
42	10/22/09 10:55:27 10.004ms	170 V
43	10/22/09 10:55:27 10.248ms	171 V
44	10/22/09 10:55:27 10.492ms	171 V
45	10/22/09 10:55:27 10.736ms	171 V
46	10/22/09 10:55:27 10.980ms	171 V
47	10/22/09 10:55:27 11.224ms	165 V
48	10/22/09 10:55:27 11.468ms	153 V
49	10/22/09 10:55:27 11.712ms	145 V
50	10/22/09 10:55:27 11.956ms	138 V



## File save and open

1. Click the  icon to open the file save dialog box.
3. Name the file and save it with the default “.avdata” extension. The file will be saved with this extension to be reopened in the Datalogger software program and also as a “.xls”file to be opened in Excel or other word processing program.
4. Click on the  icon to open and view an existing data file in the data graph window. When prompted, select a “. avdata” file saved earlier.



## Print graph and list

Click the icon  to print the graph.

Click the icon  to import data to a list, then click  to print the list