GemView and Plotter Manual

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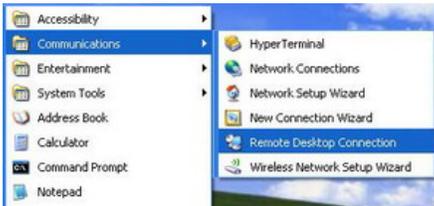
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1. Log on to heppc26

   1-1. Log on to hepp26 using the user name and password: *Gemview/12345* (casual users) or *Gemview Developer/12345* (developers).

   1-2. Making remote connection to heppc26.

   a. Run the "Remote Desktop Connection" program on your computer, as shown in the figure below.

   b. Type in IP Address of heppc26 which is 129.107.78.8.

   c. Type in the user name and password set as in 1-1.a above: Gemview/12345 (casual users) or Gemview Developer/12345 (expert users)

2. Gemview Manual

2-1. Start Gemview program by double clicking on the shortcut "Gemview" on the desktop of heppc26.


2-2. After starting Gemview main executable, the Gemview window shown in the figure below will pop up.   This is the "run" mode of Gemview.

   a. In this mode, you can control run parameters in this mode:
   - Number of Events/run: The maximum number of event per each run.
   - Number of sampling/event : Total number of ADC samplings per event
   - Data Recording: Turns on or off data recording onto disk

File Name: The filename of the data file to be written, including its full directory path. This is determined automatically, and the field is blank till the run begins.
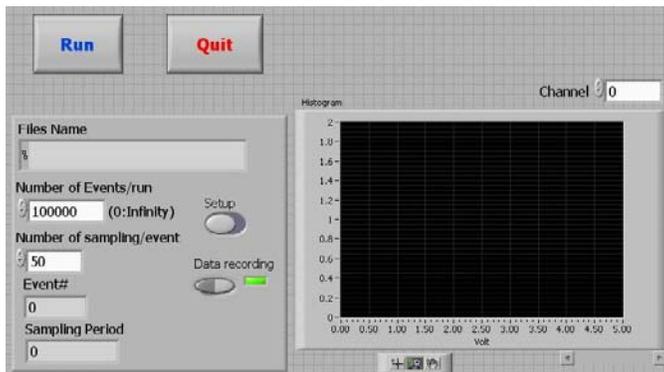

(This picture is Gemview main.)

2-3. Click on the "setup" tab located below the file name box, if you want to change other run parameters that are preset. This triggers an action to bring up two menu tabs: "Display" and "Setup", as shown in the figure below. You can change other parameters in this "setup" mode.   However, in general, one does not need to change any of these parameters.   To start data taking without making any changes, skip to step 2-5.
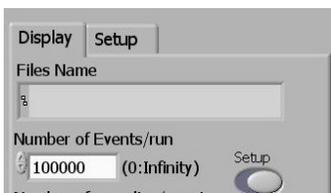
2-4. In the additional run parameter configuration panel you will be able to change parameters.

   a. You can set a total of seven parameters:

- base path : The path in which the data files will be stored. You can change the subdirectory where the data files are written by clicking on the file folder icon on the right.
- input channels: Number of input changes. You can type in channels numbers (0, 1, 3, 5, etc), channel range (0:4) or the total number of channels from the first channel, channel #0.
- scan rate : Sampling rate and determines the sampling interval
- peak type : Sample peak polarity, positive or negative
- trigger type, mode and level (※ Digital Trig does not need Trigger mode and level)
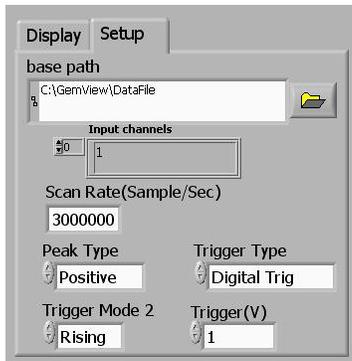

2-5. After setting up the initial run parameters in 2-2.a, click on the analyze button in Gemview main (you can see in step 2-2) to start the data taking run. Then Gemview taking module will pop up. And it shows both the histogram of the peak values and the waveform of the incoming pulse from each channel. You can switch between channels by clicking the "channel" bar till it displays the desired channel number.
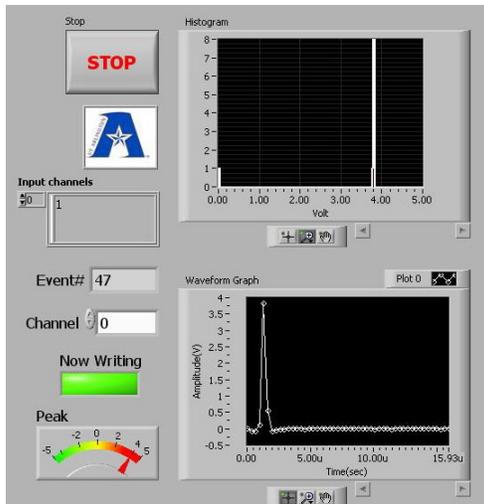
(This picture is scanning module.)

2-6. Gemview will automatically stop taking data when it reaches the maximum number of events in a run set in step 2-2.a. It also can be manually stopped by clicking the stop button.   When the run stops, the program will display

a. The full data filename, if recording was turned on before the run.
- The filename is automatically assigned as "run-##.txt", where the run number, ##, is automatically incremented based on the last run within the subdirectory where the data files are written.   Thus, if the subdirectory changes, the run number will reset unless there already exists a file with the desired starting run number.

b. The total sampling period, as it was initially set.

c. The resulting histogram of peak values.   One can switch the display to other channels by clicking on the "channel" bar above the histogram.
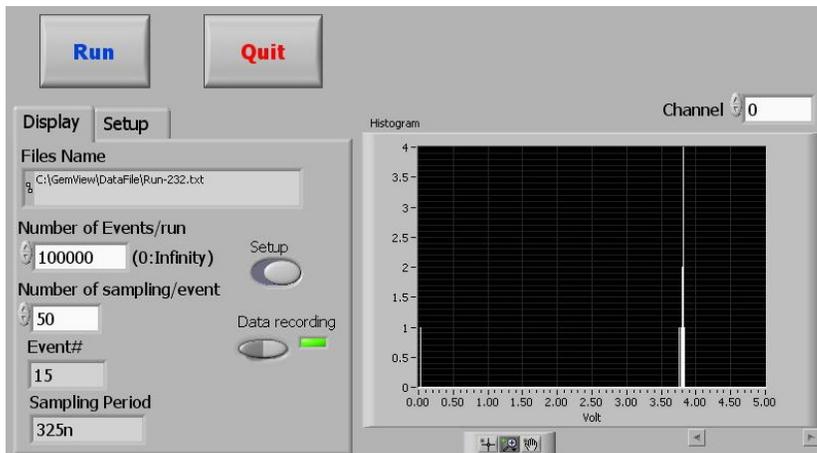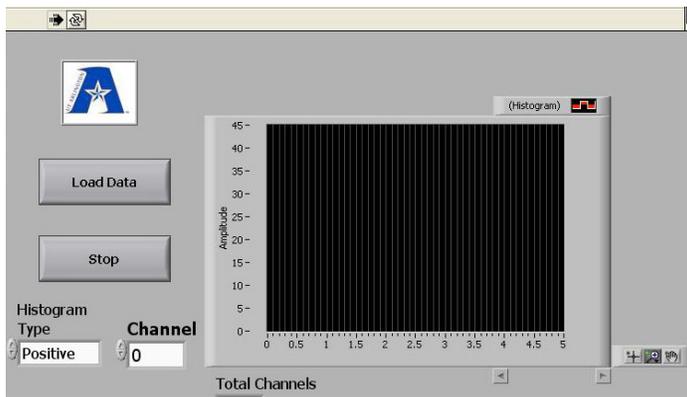
3. Plotter Manual

3-1. Start Plotter by double clicking on the shortcut *Plotter* on the desktop.
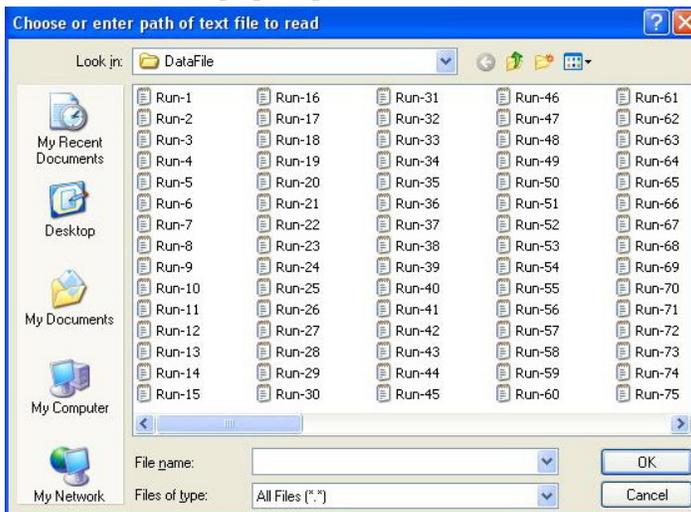

3-2. Double clicking that icon, Plotter program will pop up.

(This is plotter program.)

3-3. Click the "Load Data" button to select the data file to be read in from the file list window that pops up.

3-4. After choosing the data file, the plotter will read the data from the file and displays them in histograms.

    a. If data file had multiple channels, "total channels" box will show how many channels are included in the chosen data file. One can switch to different channel histogram display by clicking on the "Channel" box till it reaches to the desired channel.

    b. If you can not see histograms even though the file contained the data in the correct format, change the histogram type and then reload the data file.