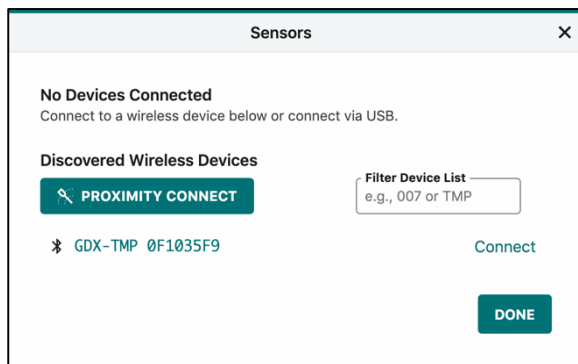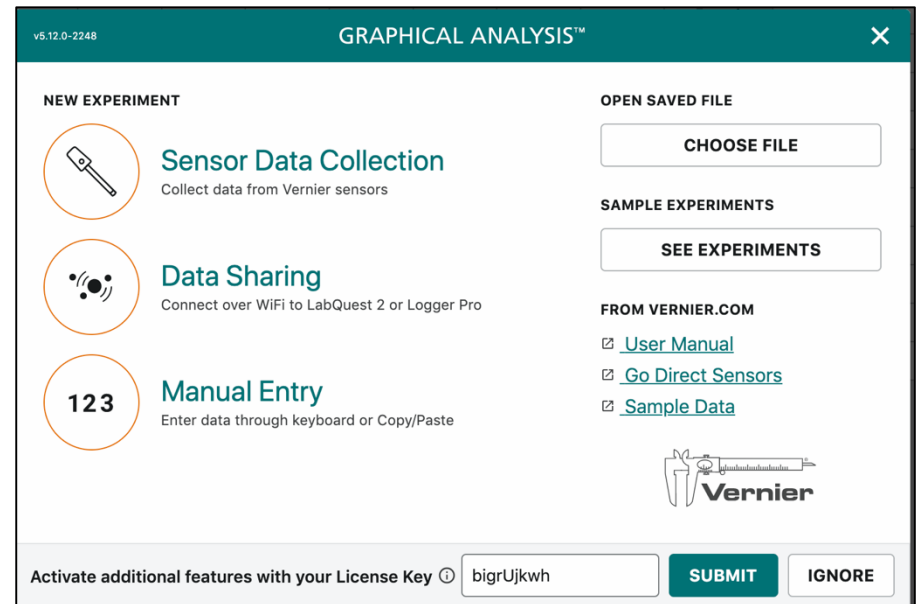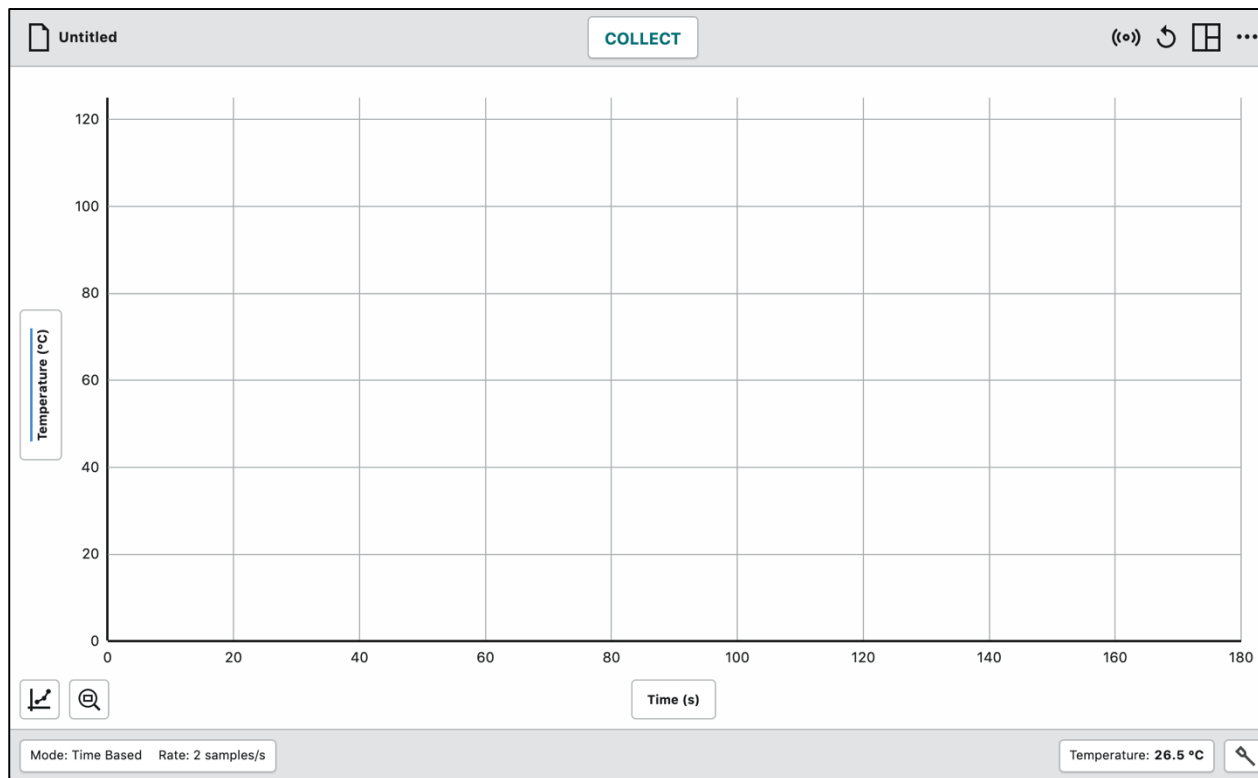# Graphical Analysis Primer

As GA boots up, a **Graphical Analysis** dialog box will ask if you want to start a new experiment or open a saved file. This dialog will also appear when the box in the upper left corner is clicked from the graph screen.

Data can be collected via a USB connection, Bluetooth or via Data Sharing using a LabQuest 2, computer running Logger Pro or Graphical Analysis Pro (A single LQ 2 can send data to multiple devices). The devices must be on the same wireless network as the LQ 2 and the devices configured for Data Sharing. Manual Entry allows you to input your own data.

This graphic shows the wireless devices discovered which can be connected. Proximity Connect will pick the closest device, or you can type the last few digits of the unique ID number in the filter box and it will find the relative sensor.

This graphic shows the Graph Screen when a USB connection is used and a temperature probe is connected (it will look the same if the sensor is connected via Bluetooth). Note the icons in each of the corners.

Each time you hit the **Collect** button, a new data set will run. Click on the label on the y-axis to select which data sets are displayed. Check and uncheck boxes to display various data
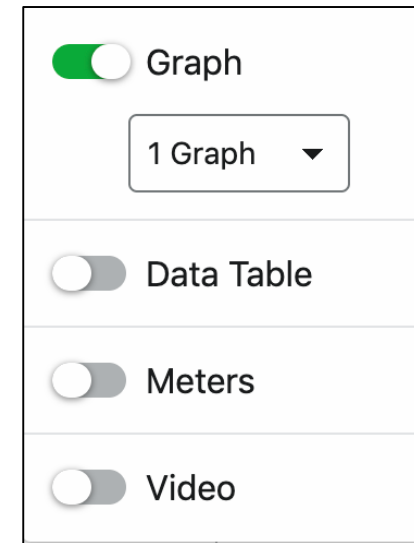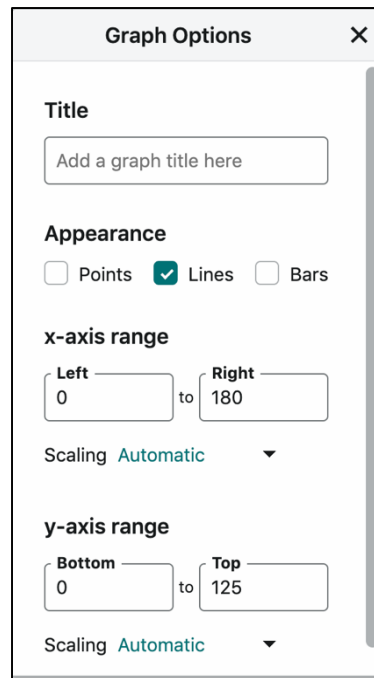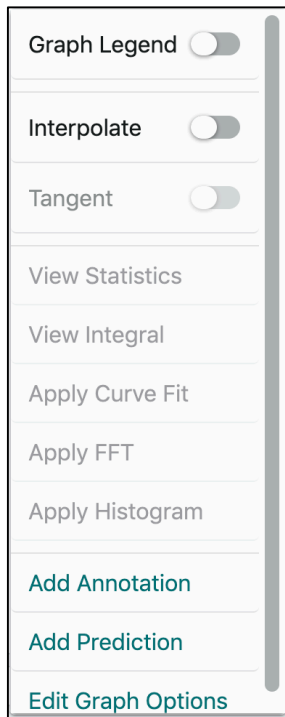
If you click the Mode box in the lower left corner, a **Data Collection Settings** dialog box will appear. The data collection mode can be set as well as the data collection rate.
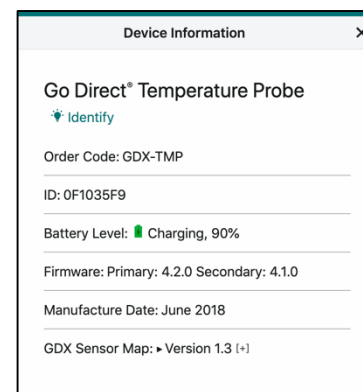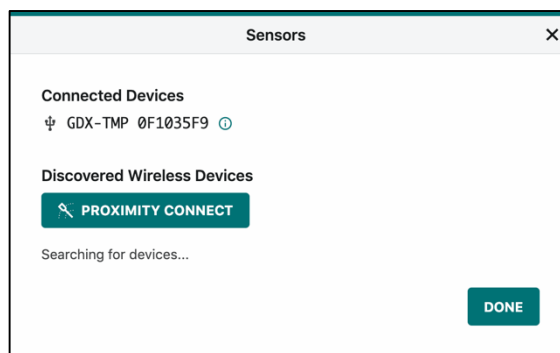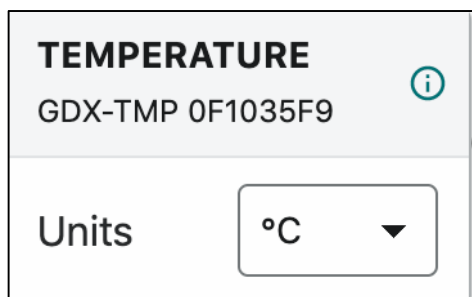
If you click the graph icon in the lower left corner, a dialog box will appear. This has analysis tools such as statistics and curve fits and will allow you to add annotations, predictions etc. Some options are only available in the Pro version. If you click the **Edit Graph Options** box, a **Graph Options** dialog box will appear which

Graph Legend ⬤
Interpolate ⬤
Tangent ⬤
View Statistics
View Integral
Apply Curve Fit
Apply FFT
Apply Histogram
Add Annotation
Add Prediction
Edit Graph Options

Graph Options ✕

Title

Add a graph title here

Appearance

☐ Points ☑ Lines ☐ Bars

x-axis range

Left: 0 to Right: 180

Scaling Automatic ▾

y-axis range

Bottom: 0 to Top: 125

Scaling Automatic ▾

⬤ Graph

1 Graph ▾

⬤ Data Table

⬤ Meters

⬤ Video

If you click the three boxes icon in the upper right, a dialog box will allow you to select what is displayed. Graph, table etc. The three dots icon gives additional information.

If you click the boxes in the lower right, dialog boxes will give you options and information on the sensor connected.

If you click the "i" on the sensor box, additional information will be provided.