LabQuest 3 Primer

The LabQuest3 is very similar to the LQ2, but has more power and capabilities. Older sensors with white plugs and be connected via the various ports/channels. The newer GDX sensors can be connected via a USB cable or Bluetooth. It is easy to configure an experiment on the LQ3.

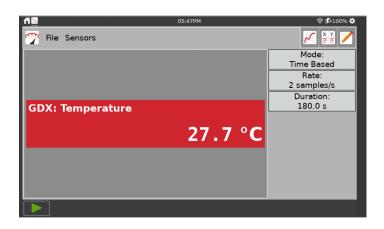
When a probe is connected to the LabQuest3, it should auto ID and open a window specific to that probe. The example to the right is one for a Go Direct temperature probe connected via a USB cable. This "Meter" screen is typically the default.

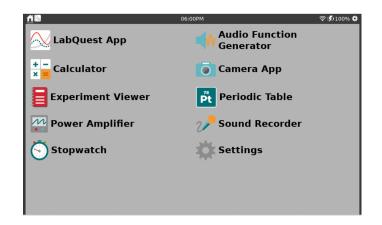
You can use your finger to tap the screen and navigate the various options.

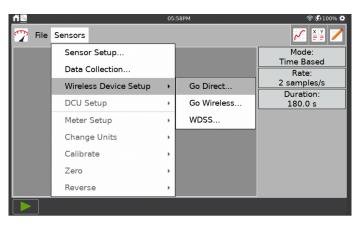
The icons in the top left open a "Home" window with other options. If you get lost, go here to get back to the LabQuest App.

If you wish to connect a GDX sensor via Bluetooth, go to **Sensors/Wireless Device Setup/Go Direct**. A dialog box with all the available sensors will appear. Each sensor has a unique ID code (on the back beneath a bar code). Be sure and select the correct one.



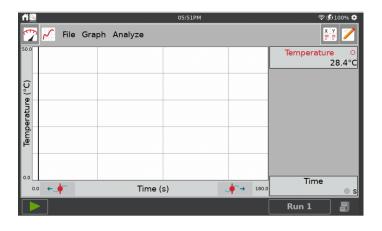




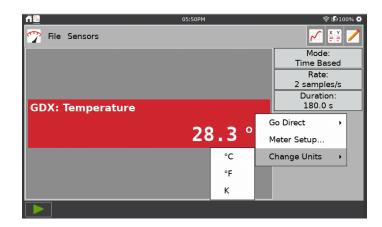


If you tap on the red-orange meter bar, various options will appear. You can change units and sometimes calibrate the sensor. Different options will appear for different sensors.

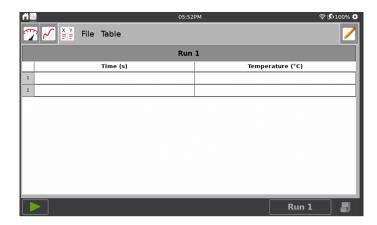
If you tap on the "Graph" icon, a graph of the data will be displayed. This example is blank since no data has been collected yet.

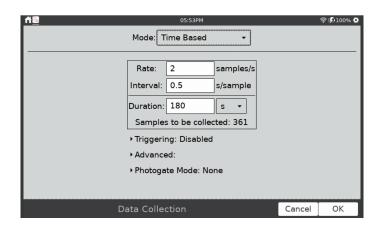


The default experimental mode is **Time Based**, which means that data will collected over time. If you wish to change any of the experimental parameters, tap on the **Mode/Rate/Duration** box from the "Meter" screen. Several options are available.
Advanced options such as Triggering are also available.

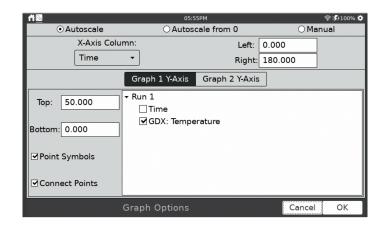


If you tap on the "Table" icon, a data table will be displayed. This example is also blank since no data has been collected yet.





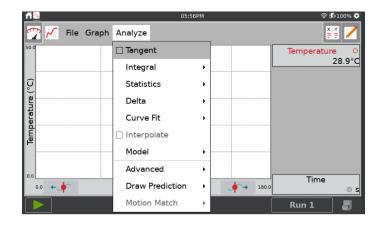
On the "Graph" screen, select **Graph/Graph Options**. This will allow you to customize the appearance of the graph, scaling etc.



On the "Graph" screen, select the **Analyze** pull-down to display several useful analysis tools such as **Predictions, Statistics, Curve Fits** etc.

Different windows have different pull-down menu options. These options are not available in every window. If you don't see what you are looking for, try a different window.

The **Table** pull-down from the "Data Table" screen allows work with the data, such as Calculated Columns which act like a spreadsheet.



LabQuest Viewer computer software utilizes the wi-fi capabilities of the LQ3. The teacher can wirelessly project the screen of their LQ3 as well as log into student devices to showcase class data.

The LQ3 can also share experimental data via wi-fi to other devices such as computers and smart phones running the free *Graphical Analysis* App.