Types of Graphs and Charts

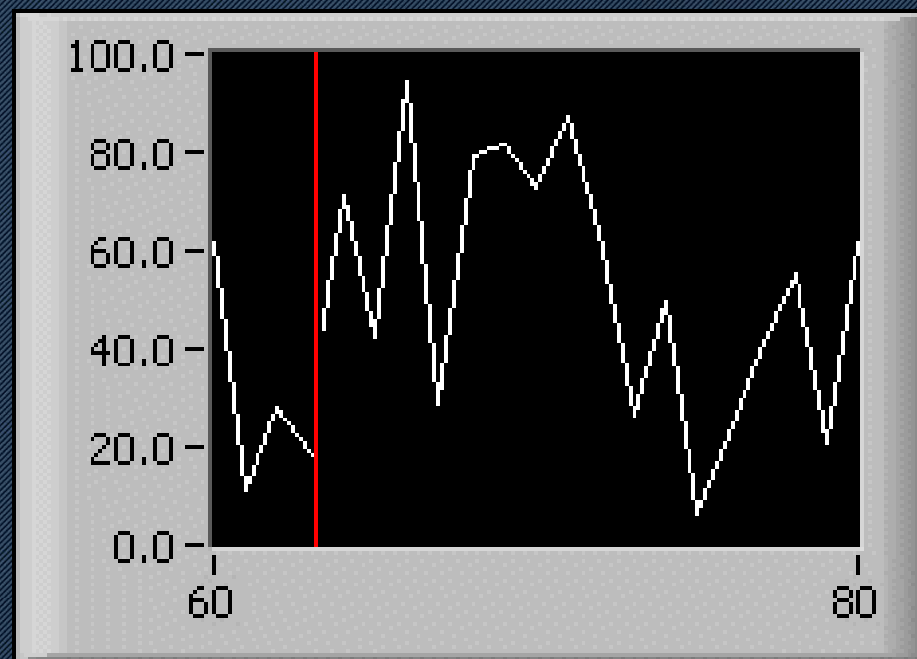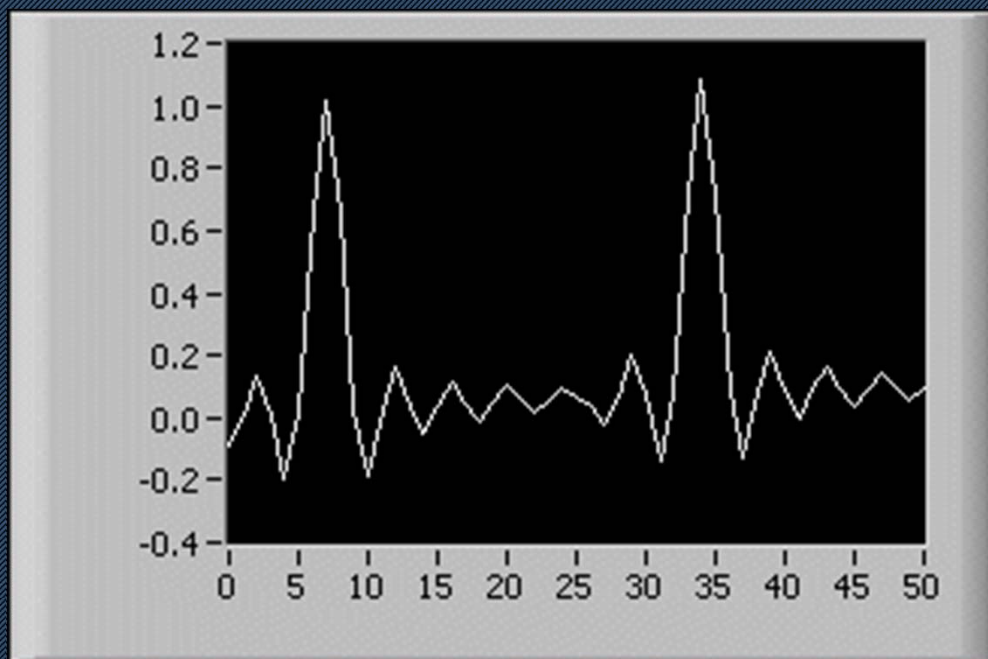MEMS 1049 Mechatronics

四川大学 匹兹堡学院

Outline

- Waveform Graph & Charts

- Multiple Plots

- Customization

- Data Export
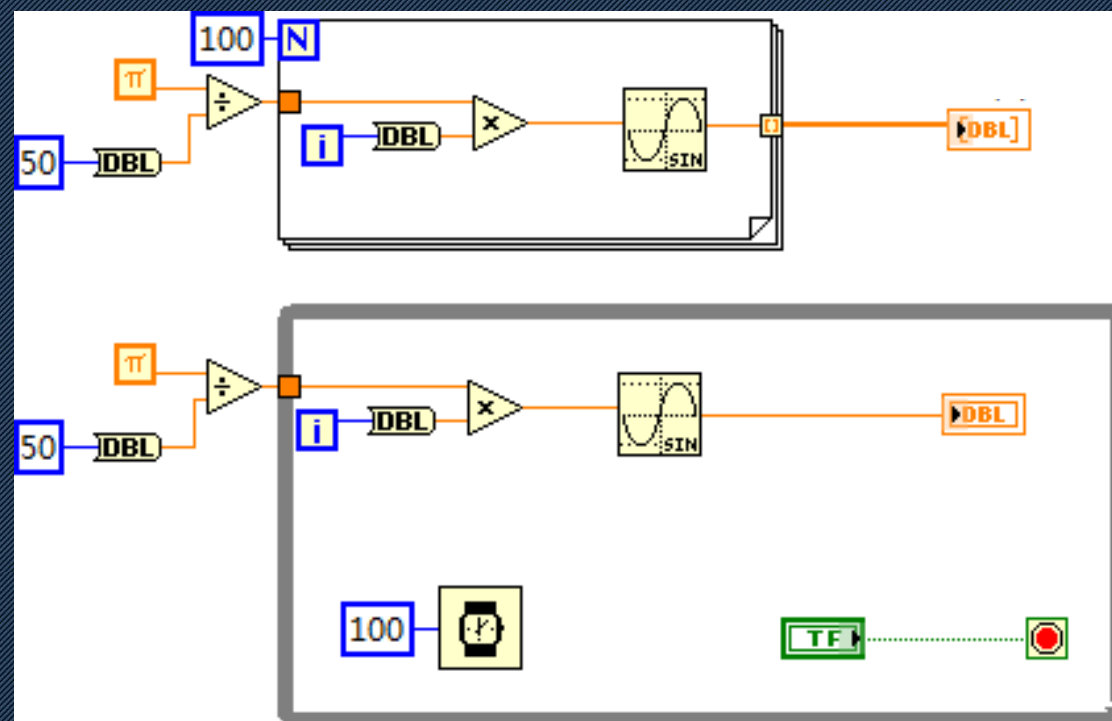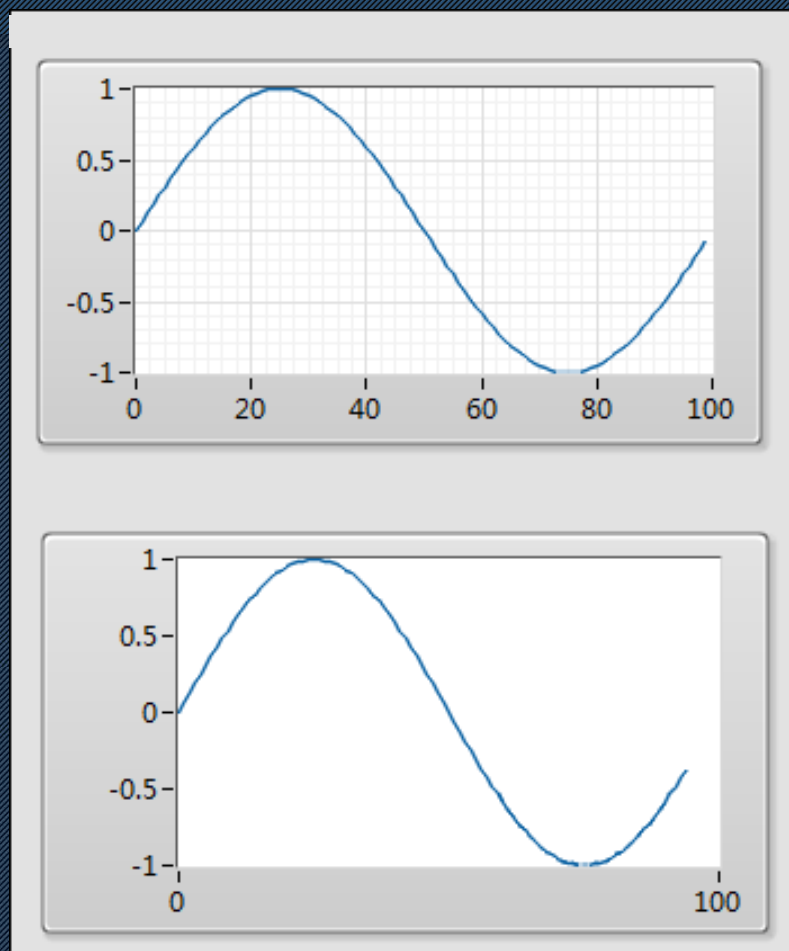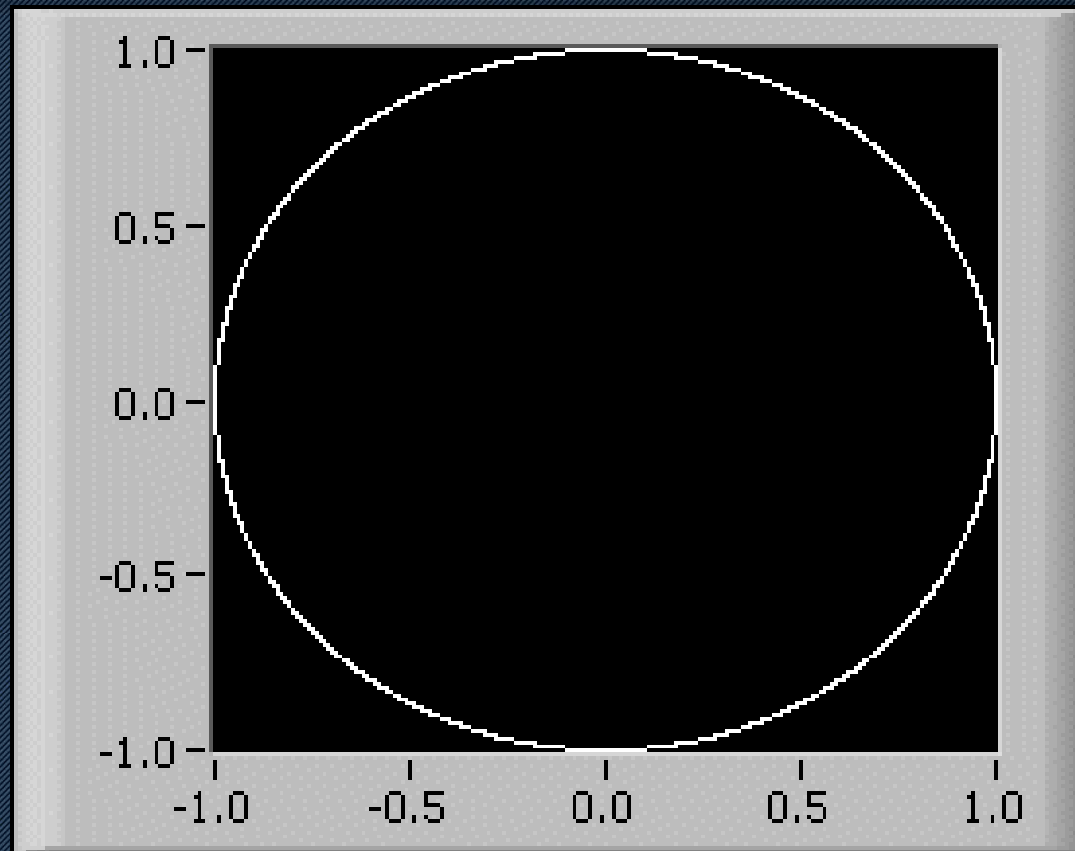
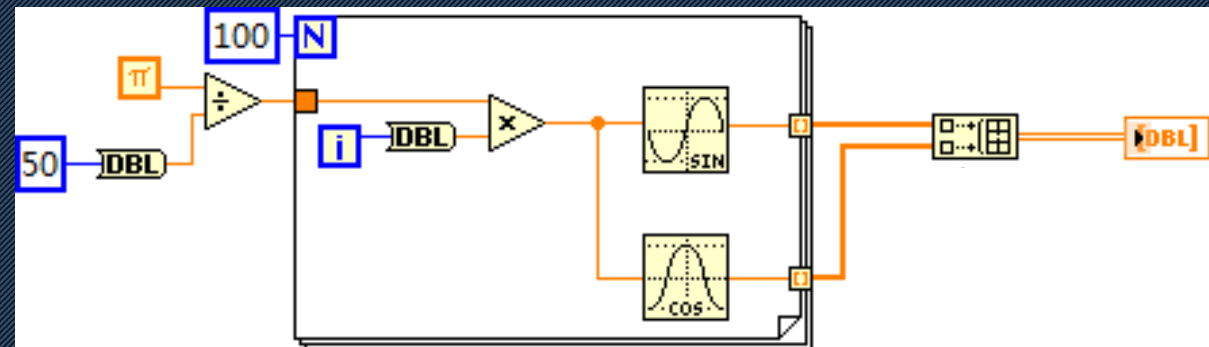# Waveform Graph and Waveform Charts
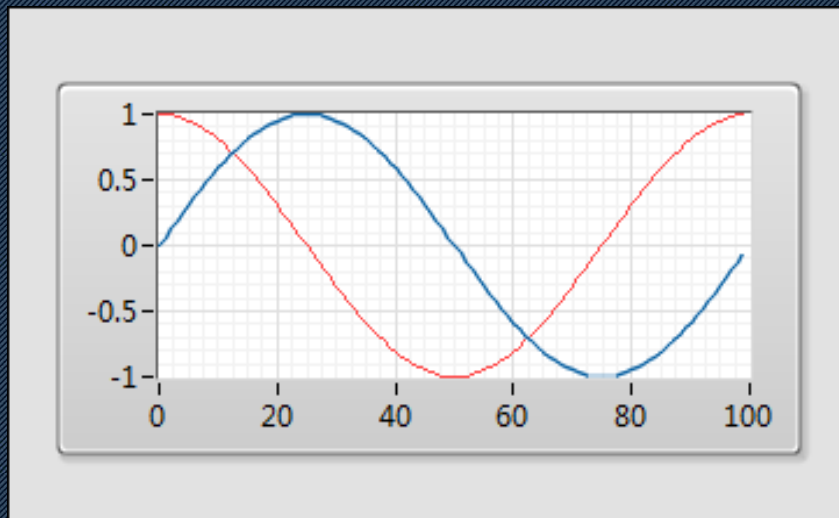
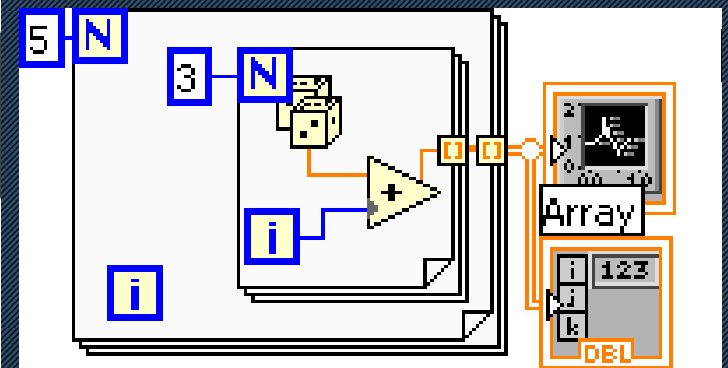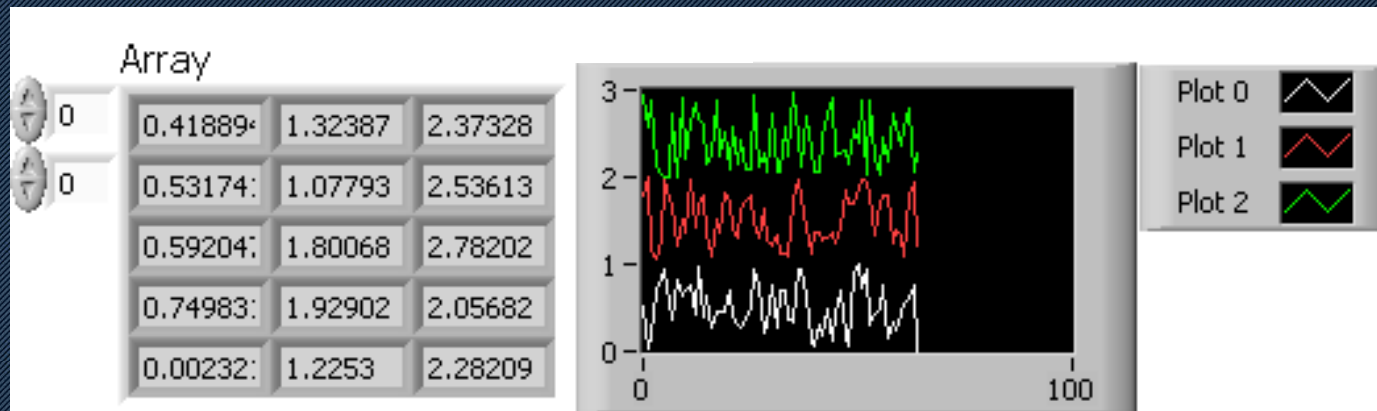# Waveform Graphs and Charts

XY Graph

Multiple Plots Graph

• Each row of the array is a single plot
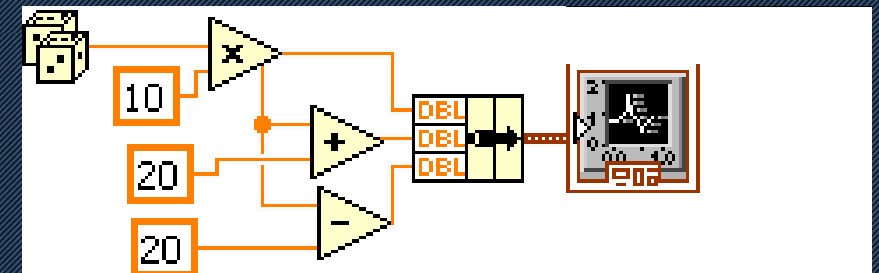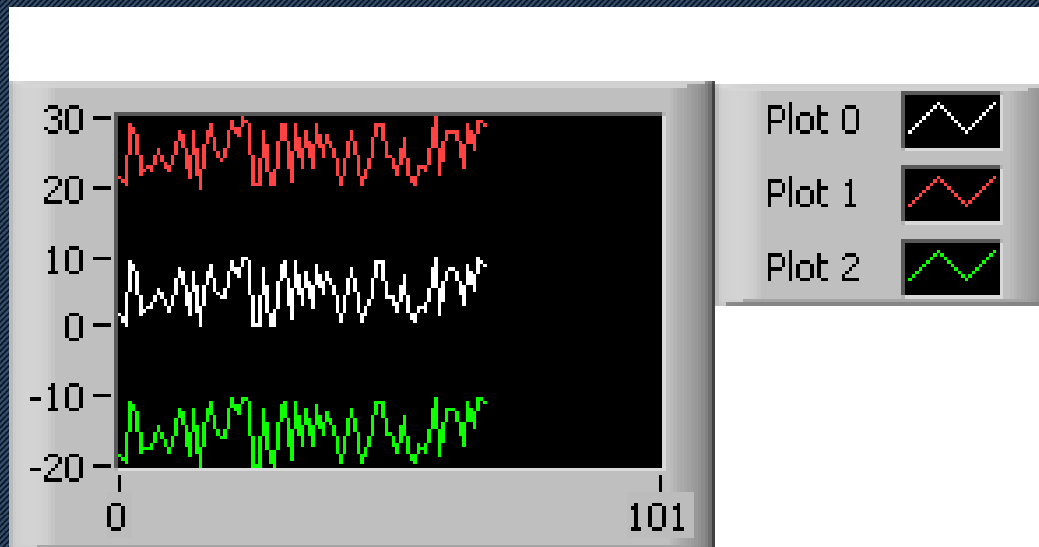
Multiple Plots Charts

- Each column of the array is a single plot (default settings)
- Transpose array
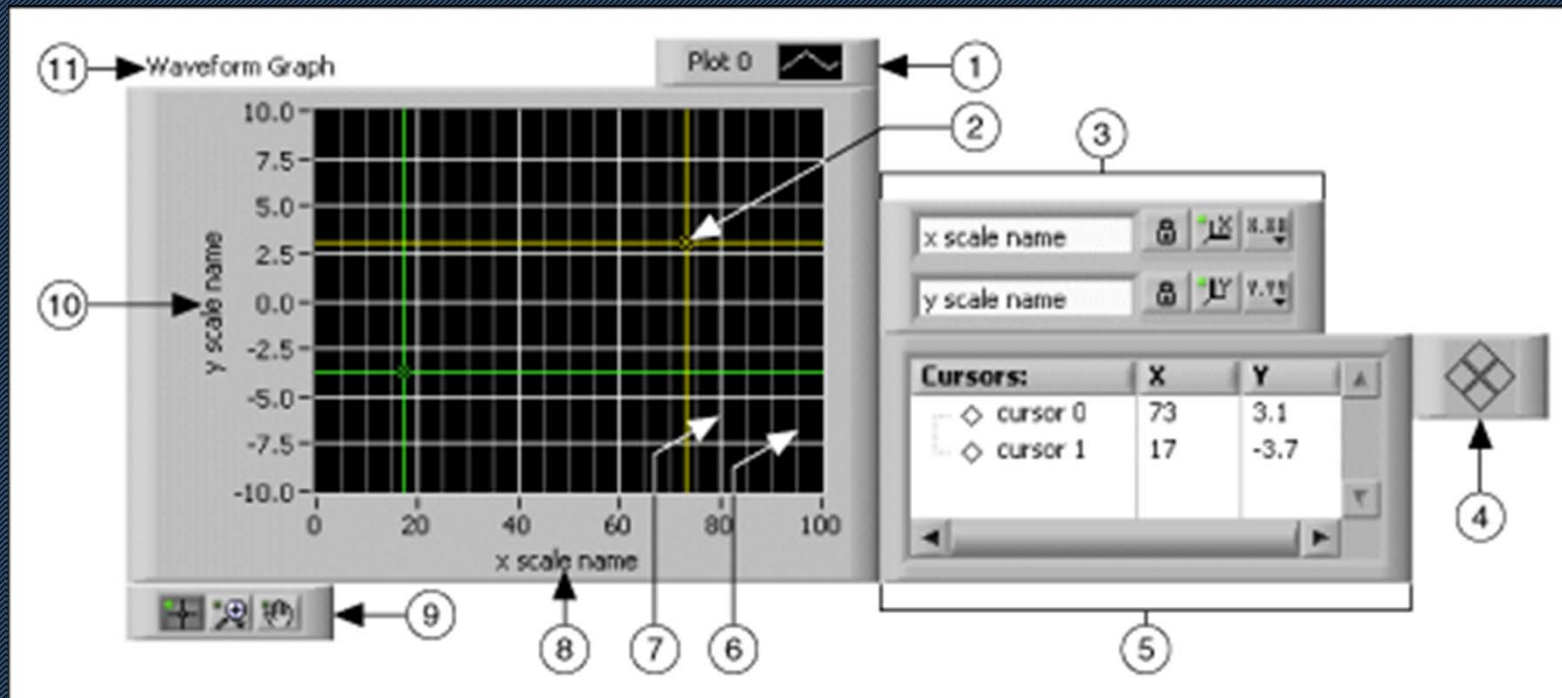
Multiple Plots Charts

- Each array in the cluster is a single plot

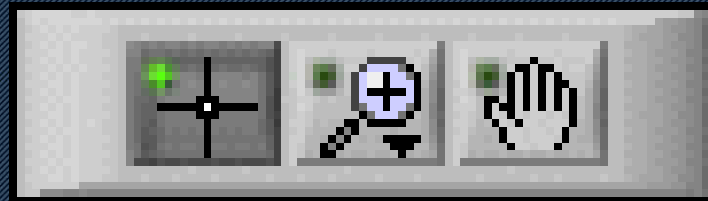# Customizing Waveform Graph

Graph Palette

- **Cursor Movement Tool**—Moves the cursor on the display. This button applies only to graphs.
- **Zoom**—Zooms in and out of the display.
- **Panning Tool**—Picks up the plot and moves it around on the display.

Using Scale Legends

- Use the Operating tool to click the Scale Lock button, shown as follows, to toggle autoscaling for each scale.

- Use the Autoscale button, shown as follows, to adjust the scale to reflect the data you wire to the graph or chart.
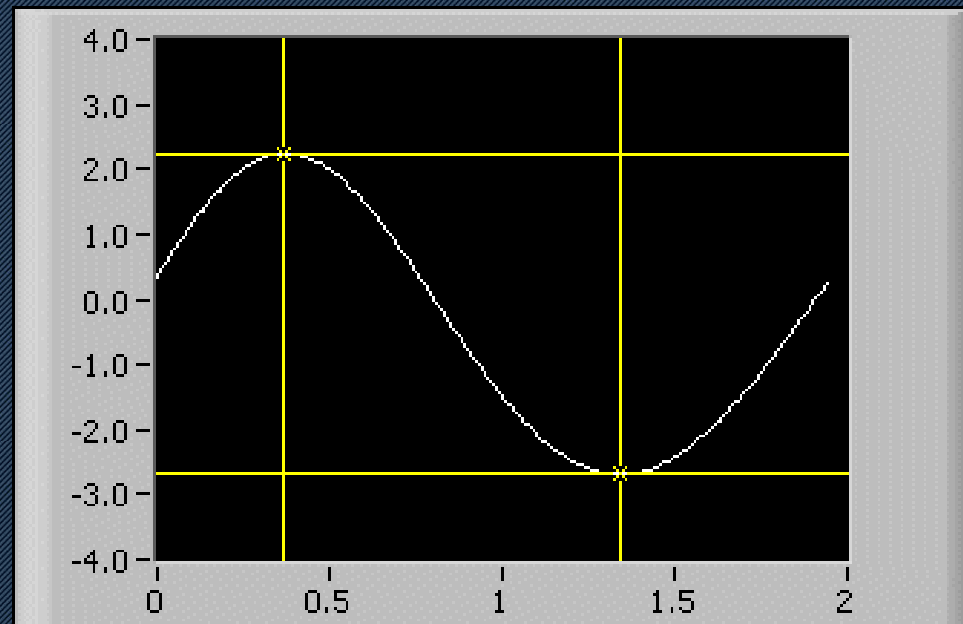

- Use the Scale Format button, shown as follows, to configure the format, precision, and mapping mode, set the visibility of the scale and scale label, and specify the grid color.
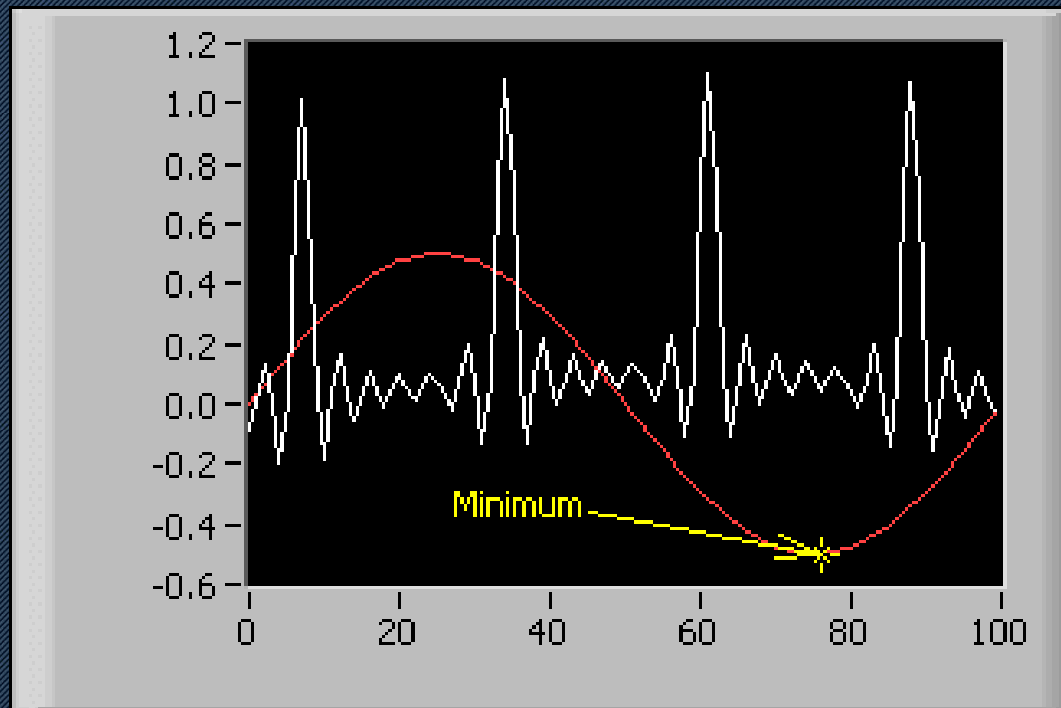
Create a Cursor

To add a cursor to the graph, right-click anywhere in the cursor legend, select Create Cursor, and select a cursor mode from the shortcut menu.
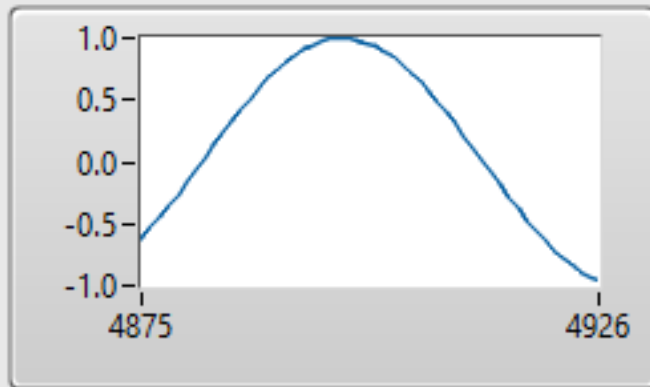
Using Graph Annotations

Right-click the graph and select Data Operations→Create Annotation from the shortcut menu to display the Create Annotation dialog box.
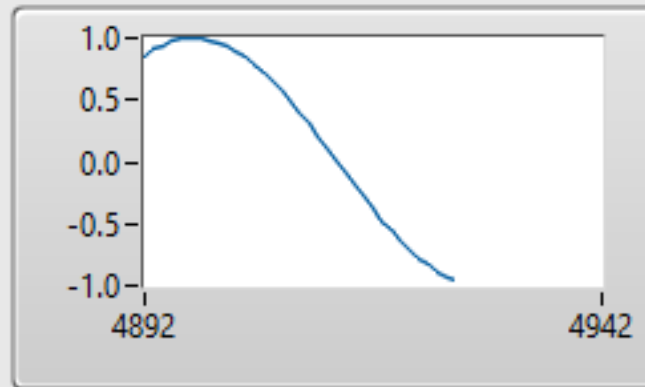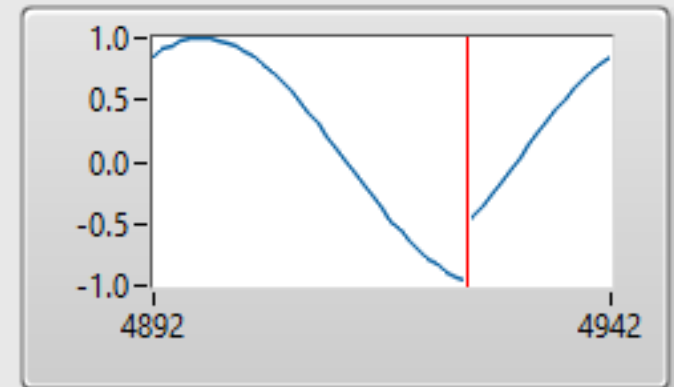
Waveform Chart Update Mode

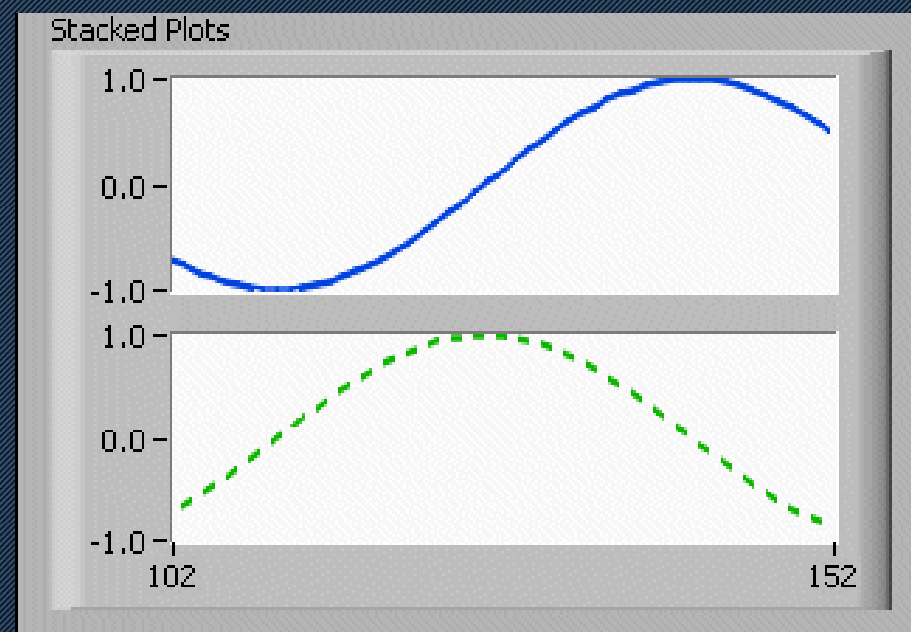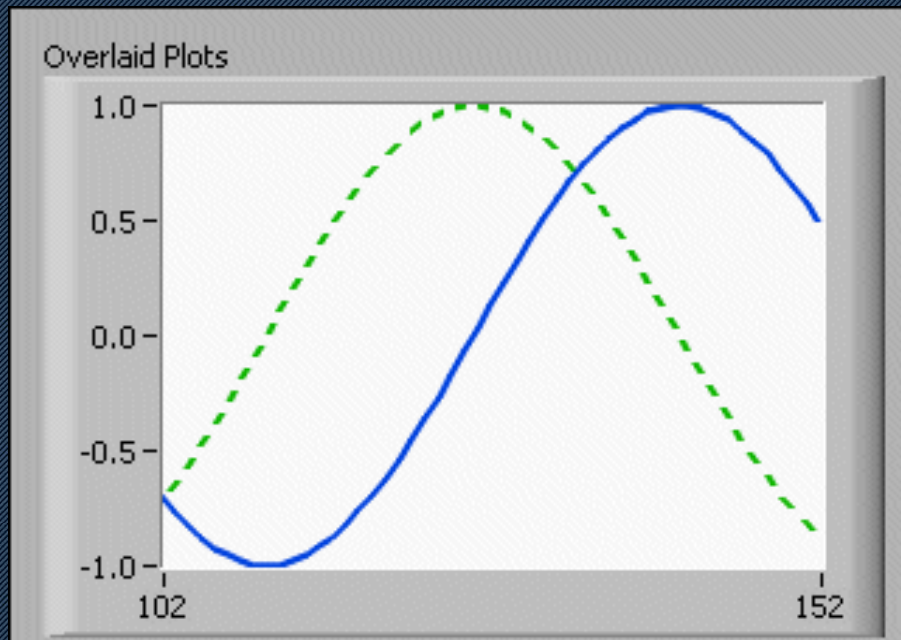Single Update (Strip Chart)

Single Update (Scope Chart)

Single Update (Sweep Chart)

Right-click the chart and select **Advanced > Update Mode** to choose between **Strip Chart**, **Scope Chart**, and **Sweep Chart** update modes.
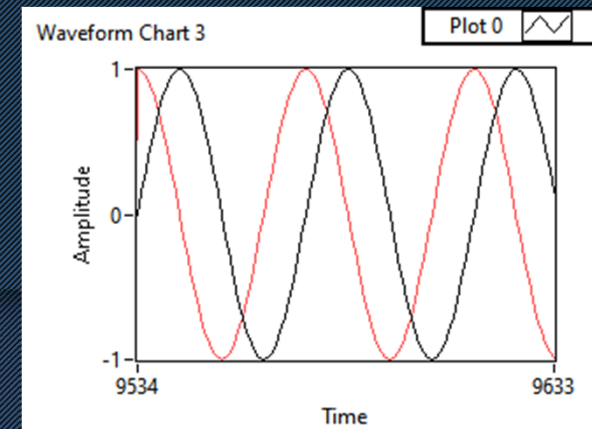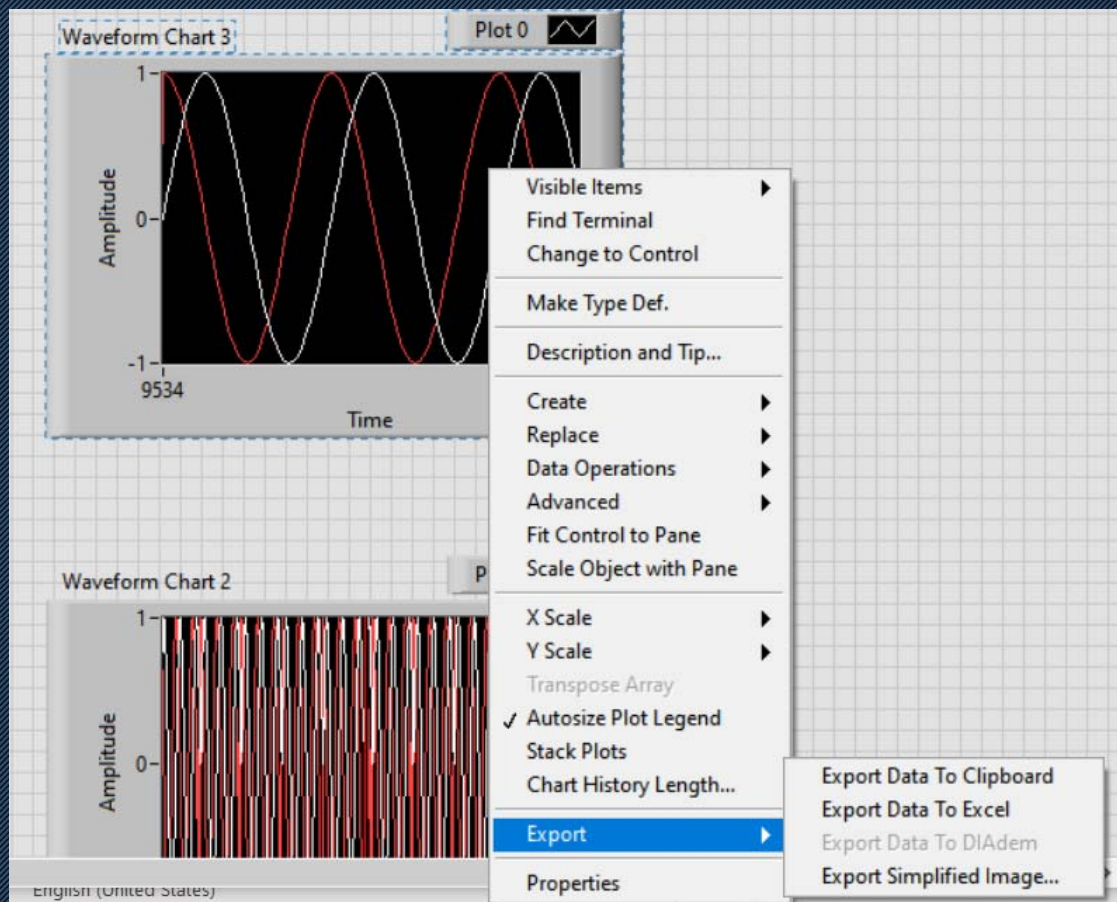
Using Overlaid and Stacked Plots

Data Export

Studio

Use Signal Processing->Signal Generation->Sine Pattern.vi to produce the pattern as shown in the figure