

Concept: Controls and Indicators

Goal

Create a front panel with controls and indicators using a variety of different styles and types of controls and indicators, and modify their properties, appearance, and layout.

Description

In this exercise, you begin with a blank front panel and create two controls and an indicator, then adjust their properties. This task gives you experience using controls and indicators.

Implementation

The files that you need to complete this exercise are here:

<NI eLearning>\LV Core 1\Documenting Code\Exercise.

1. Open a new VI.

- ☐ Open LabVIEW.
- ☐ Select **File»New VI**.

2. Add two Numeric Controls onto the front panel.

- ☐ Select **View»Controls Palette**.
- ☐ Select the **Numeric** category.
- ☐ Select and drag the **Numeric Control** onto the front panel.
- ☐ Repeat for a second **Numeric Control**.



3. Rename the first numeric control `Control 1`.

- ☐ Double-click the label above the control.
- ☐ Enter the text `Control 1`.

4. Rename the second numeric control `Control 2` in the same way.

5. Add a Numeric Indicator onto the front panel.

- ☐ Select and drag the **Numeric Indicator** onto the front panel.



6. Rename the Numeric Indicator Indicator.

- ☐ Double-click the label above the indicator.
- ☐ Enter the text Indicator.

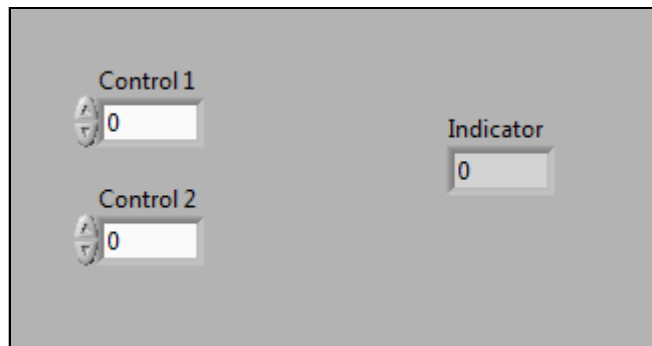


Figure 1. Numeric Controls and Indicators Front Panel

7. Change the range of the numeric controls.

- ☐ Right-click the first numeric control and select **Properties**.
- ☐ Click **Data Entry**.
- ☐ Uncheck **Use Default Limits**.
- ☐ Change the Minimum value to 0.
- ☐ Change the Maximum value to 100.
- ☐ Change the increment to 1.
- ☐ Repeat this process for the second numeric control.

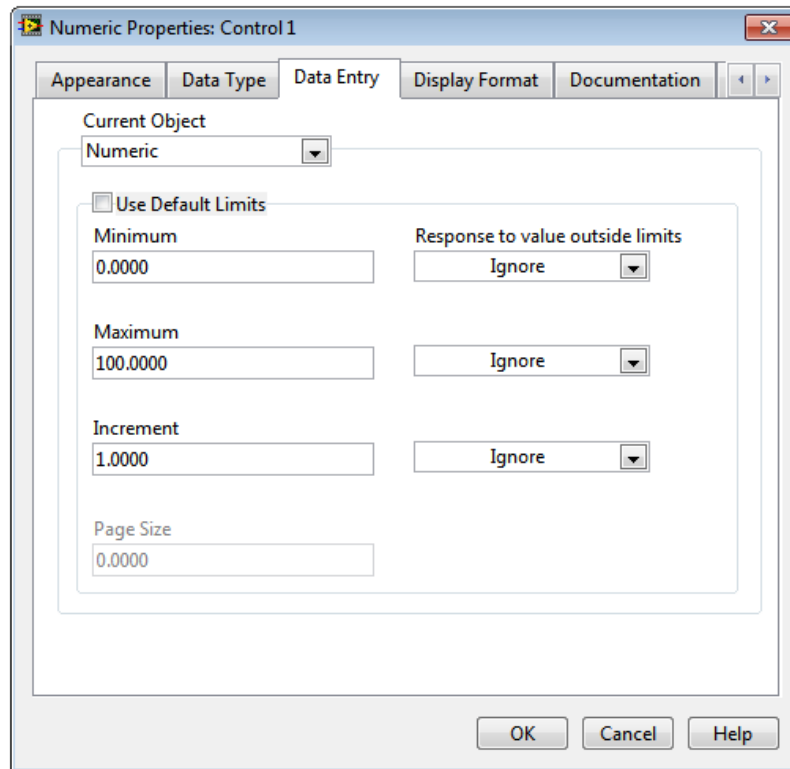


Figure 2. Properties Page of a Numeric Control

8. Save the VI.

- ☐ Select **File»Save**.
- ☐ Save the VI as `Numeric Controls and Indicators.vi` in the `<Exercise>` directory.

9. Close the VI.

10. Open a new VI.

- ☐ Select **File»New VI**.

11. Add a Vertical Toggle Switch control to the front panel.

- ☐ Select the **Boolean** category.
- ☐ Select and drag the **Vertical Toggle Switch** onto the front panel.



12. Add a Boolean indicator onto the front panel.

- ☐ Select and drag the **Round LED** indicator onto the front panel.



13. Rename the Boolean control `Control`.

- ☐ Double-click the label above the control.
- ☐ Enter the text `Control`.

14. Rename the Boolean indicator `Indicator`.

- ☐ Double-click the label above the indicator.
- ☐ Enter the text `Indicator`.

15. Add a String Control onto the front panel.

- ☐ Collapse the **Boolean** category by selecting **Programming** on the **Controls** palette.
- ☐ Select the **String & Path** category.
- ☐ Select and drag the **String Control** to the front panel.



16. Add a String Indicator onto the front panel

- ☐ Select and drag the **String Indicator** to the front panel.



17. Rename the string control `Control`.

- ☐ Double-click the label above the control.
- ☐ Enter the text `Control`.

18. Rename the string indicator `Indicator`.

- ☐ Double-click the label above the indicator.
- ☐ Enter the text `Indicator`.

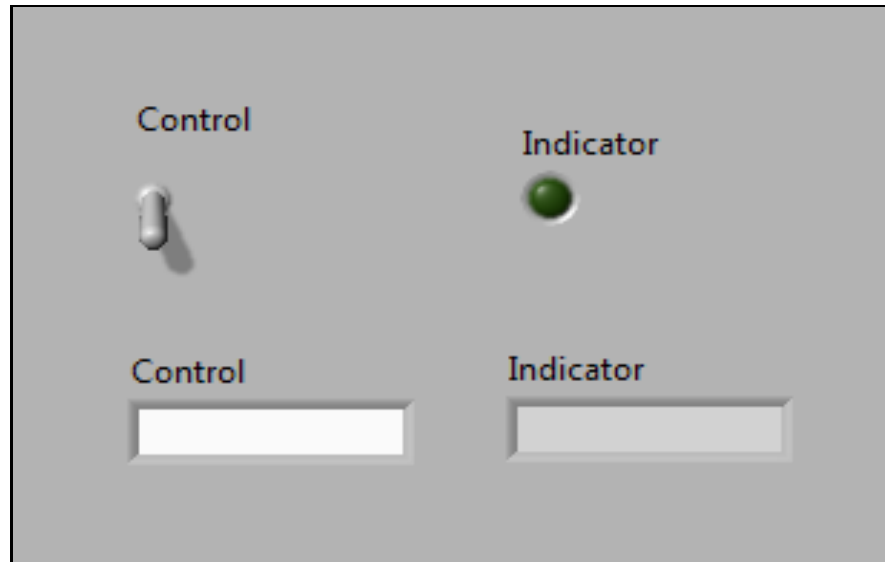


Figure 3. Controls and Indicators Front Panel

19. In the string control, type a phrase, then change the display type of the string control to backslash codes.

- ☐ Click inside the text field of the string control.
- ☐ Type `Hello World`.
- ☐ Right-click the string control and select **'\'** **Codes Display**.
- ☐ Observe how the text is displayed now.



20. Save the VI as `Controls and Indicators.vi`.

- ☐ Select **File>Save**.
- ☐ Save the VI as `Controls and Indicators.vi` in the `<Exercise>` directory.

21. Compare your VI to the provided solution VI.

22. Close the VI when you are finished.

End of Exercise

Notes
