

GETTING STARTED WITH THE FRONT PANEL LAYOUT TOOL

OVERVIEW

The Front Panel Layout Tool provides the ability to use a single VI's front panel with various different window sizes and layout configurations. This is useful when you want to use one VI as a user interface, which can be used on multiple monitors of different screen resolutions. The tool stores the position and size information of every front panel object in a configuration file next to the VI. When the VI is loaded, it can size itself and all its front panel objects based on whichever configuration file is present.

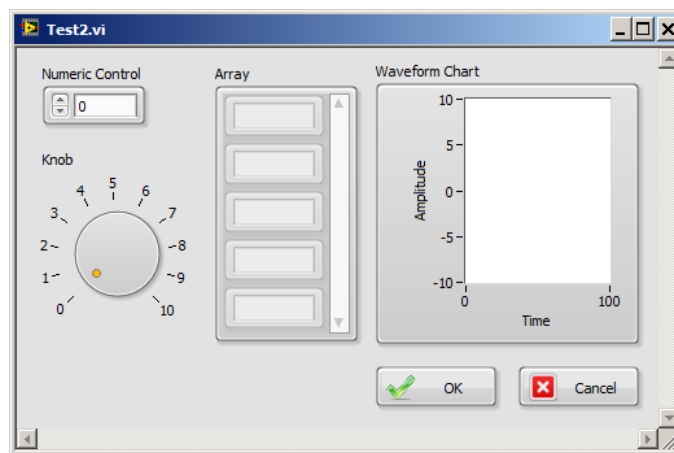


Figure 1: Test2.vi with a small layout configuration.

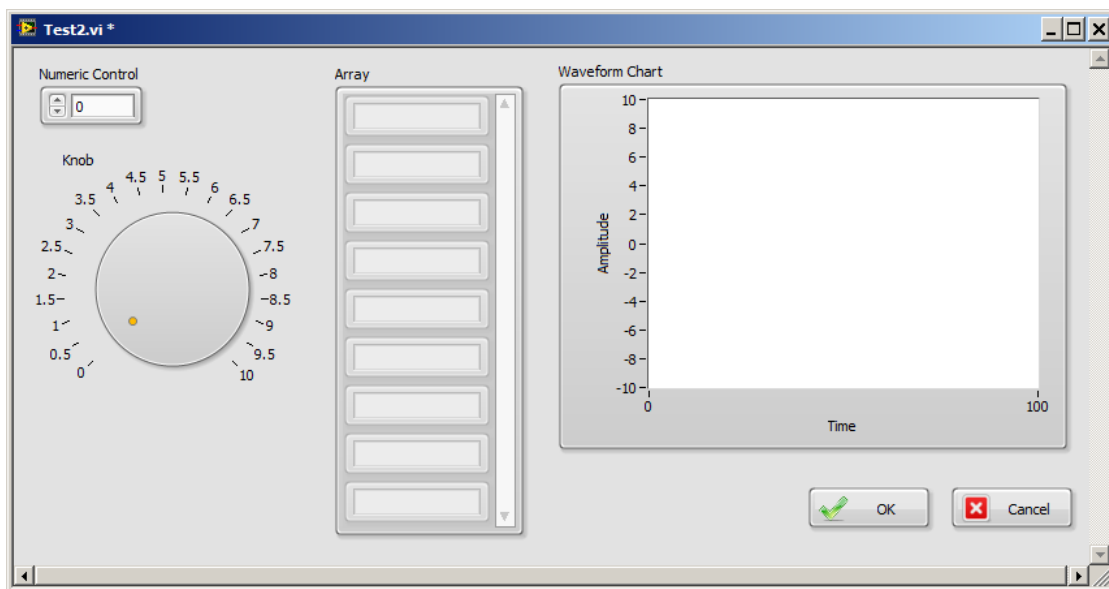


Figure 2: Test2.vi with a large layout configuration.

CREATING LAYOUT CONFIGURATIONS

Use the **Configure Front Panel Layouts** dialog to create a layout configuration from an existing VI. The dialog can be launched in one of the following ways:

- Launch the dialog from the Tools menu. Select to **Tools >> Configure Front Panel Layout...** from an open VI or project.
- Launch the dialog from the Functions palette. Open the Front Panel Layout palette (**User Libraries >> Front Panel Layout**), then click the **Configure** icon.

Once launched, the dialog will display all saved VIs that currently have open front panels. If a VI contains any subpanel controls, each subpanel will appear under the owning VI in the tree with italic text. You can drag one VI under the subpanel of another VI in the tree to indicate that it will be loaded into that subpanel at runtime. The hierarchy of the items in the tree does not affect the runtime behavior of any of the VIs.

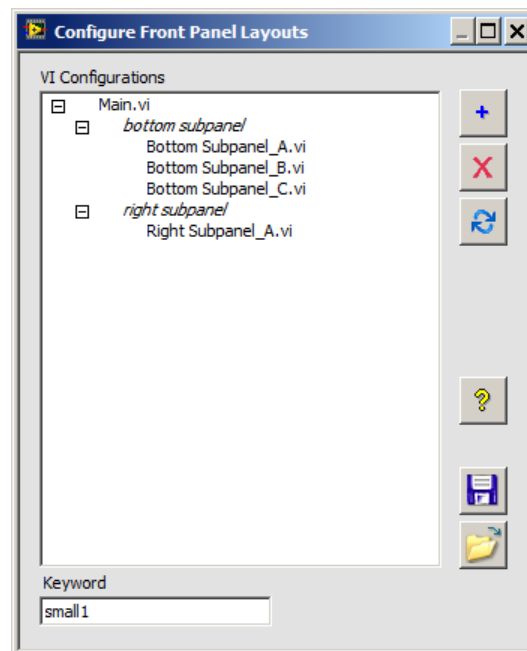


Figure 3: Configure Front Panel Layouts dialog

- Click the **Add VI** button to browse to a new VI to add to the configuration.
- Click the **Remove VI** button to remove all currently selected VIs from the configuration.
- Click the **Refresh** button to read the latest information from the VIs in the configuration. This will update any subpanel or VI names that have changed since the VIs were loaded.
- Click the **Save** button to save the current layout of each VI's front panel to disk. This will create one XML file next to each VI with the name format: `<viname>_w<width>_h<height>_<keyword>.xml` or `<viname>_w<width>_h<height>.xml`
 - `<viname>` is the VI's file name without the file extension.
 - `<width>` and `<height>` are the width and height of the VI's front panel window in pixels.
 - `<keyword>` is an optional string that can be used to distinguish different configuration files that would otherwise have the same name. The string in the **Keyword** control will be read when the **Save** button is pressed.

- Click the **Load** button to browse to an XML file containing a VI's layout configuration. If the configuration references any other VIs through subpanel relationships, it will load their configurations as well.

USING LAYOUT CONFIGURATIONS IN A RUNNING VI

Once one or more layout configuration files have been created for a VI, you can use **Load and Apply Front Panel Layout to VI.vi** to load a layout configuration at runtime. This VI is located in the Functions palette at **User Libraries >> Front Panel Layout**. It accepts a reference to a target VI, then finds a layout configuration file of the same name and applies the layout to the target VI's front panel. If this VI is running in the LabVIEW development environment, it will search in the same folder that contains the target VI. If it is running inside a built executable, it will search in the <Application>\data folder. Optionally, you can specify the path of a folder than contains the layout configuration file for the target VI.

For a reference on how to use **Load and Apply Front Panel Layout to VI.vi** with a top level or subpanel VI, see the example located at <LabVIEW>\examples\Front Panel Layout\Load Static Layouts\Load Static Layouts.lvproj.