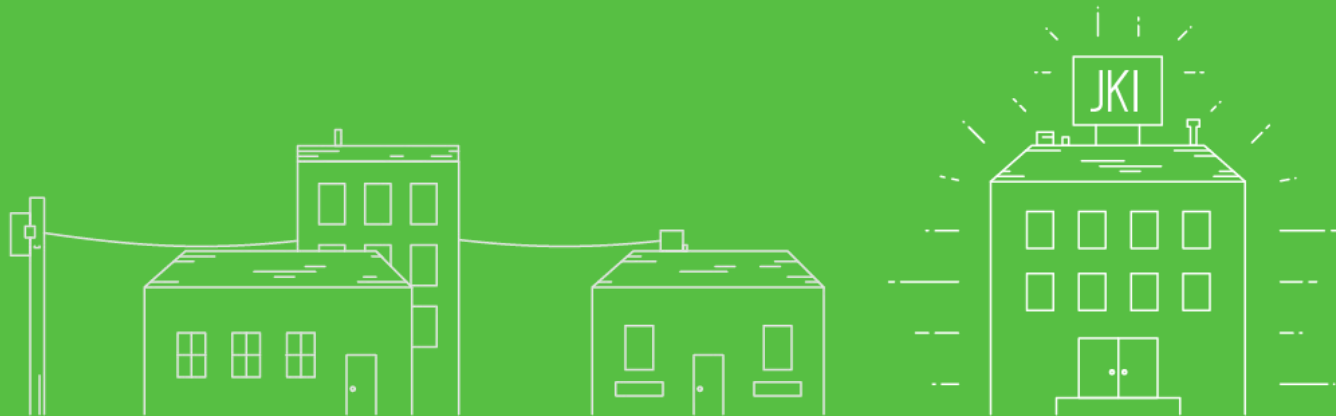




Professional UIs in LabVIEW

09/26/2019



Why Professional UIs in LabVIEW? New free tools from JKI.

**Who cares about making UIs look good?
When should you care?**

How do LabVIEW UIs come to be?

**Most LabVIEW UIs
were created by an engineer
with LabVIEW
while building a hardware system
over time.**

These (hardware) systems are amazing

**It may add lots of value
for them to look great, too**

When does it add business value?
(to have a professional UI)

When does usability drive value?

When does perception drive value?

Usability

Who will use the software?
How does getting work done
correctly and efficiently
drive business value?

Who will USE the software?

Test Operators, Systems Engineers,
Service Technicians, End Customers

Perception

Who will see the software?
How does their perception of the
software drive business value?

Who will SEE the software?

Users, Team, Stakeholders, Investors,
Customers, Partners.

**Since usability and perception
drive business value**

**User Interface and User Experience
design can make a huge difference.**

New free tools from JKI...

At JKI we take design seriously.

**We've done a lot of work learning how to
create great-looking UIs in LabVIEW.**

**We want all LabVIEW developers to be
able to create great looking UIs, too.**

Who has used the JKI Flat UI Controls?

We've been working on 2.0

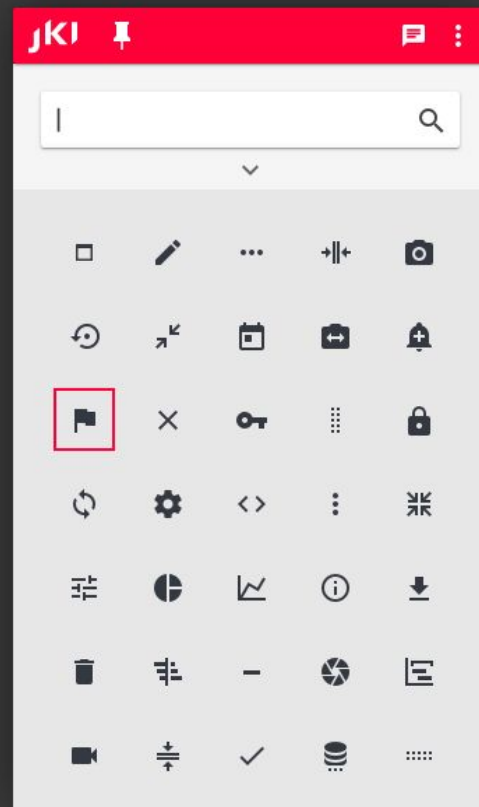
And, we decided to do it differently



Flat UI
Controls



Design
Palette



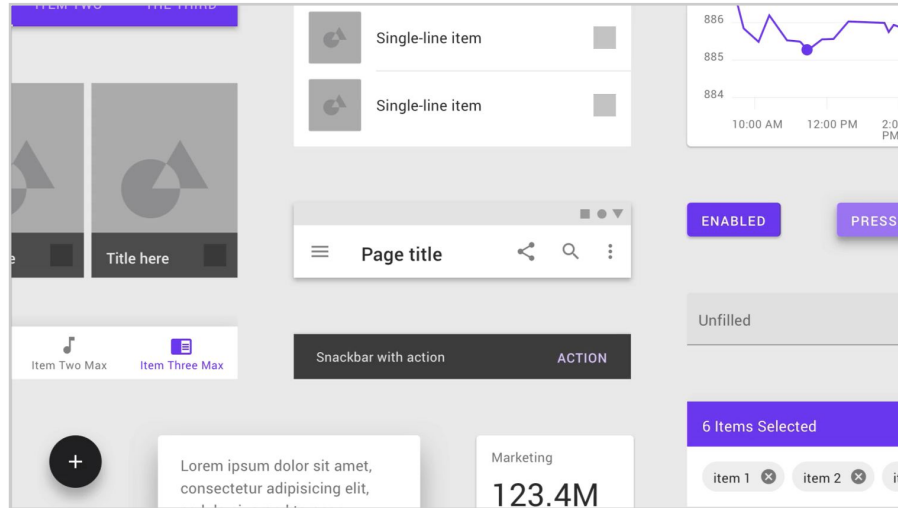


JKI Flat UI Controls 2.0 for LabVIEW



“Material Design” Style

New “Material Design” style



The Flat UI 2.0 theme has been designed using the Material Design style from Google for a more consistent experience



What's Included

- Buttons (Boolean)
- Strings + Numerics
- Arrays + Clusters
- Path, IO, DAQmx, VISA
- Graphs and Charts

The screenshot displays a software interface with several panels:

- 120x40 Buttons:** A row of 27 buttons including Apply, Apply All, Pause, Play, Stop, Download, Upload, Edit, Image, Video, Save As, Save, Power, Settings, Tune, Print, Info, Help, Flag, View, Eject, Cancel, Confirm, Merge, Split, Add, and Remove.
- 40x40 Buttons:** A grid of 93 icons for various functions like navigation, editing, and data handling.
- Transparent Buttons:** A row of 50 small, semi-transparent icons for advanced controls.
- Numerics:** A panel with 15 items containing input fields for numerical values and units (e.g., m, mm, m/s, km/h, s, h, min).
- Strings & Path, Ring & Enums, IO:** A panel with 15 items for text input, dropdown menus, and a path field.
- Graphs:** Four chart windows: Intensity Graph (Frequency vs Time), Waveform Chart (Amplitude vs Time), XY Graph (Amplitude vs Time), and another Waveform Graph (Amplitude vs Time).



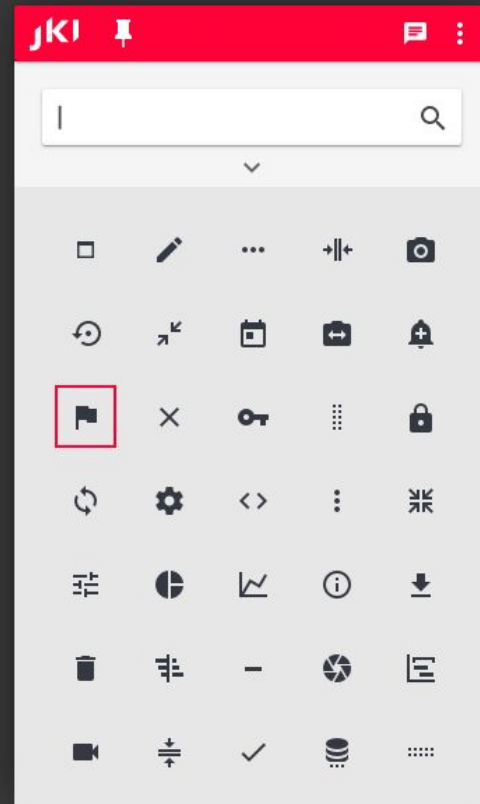
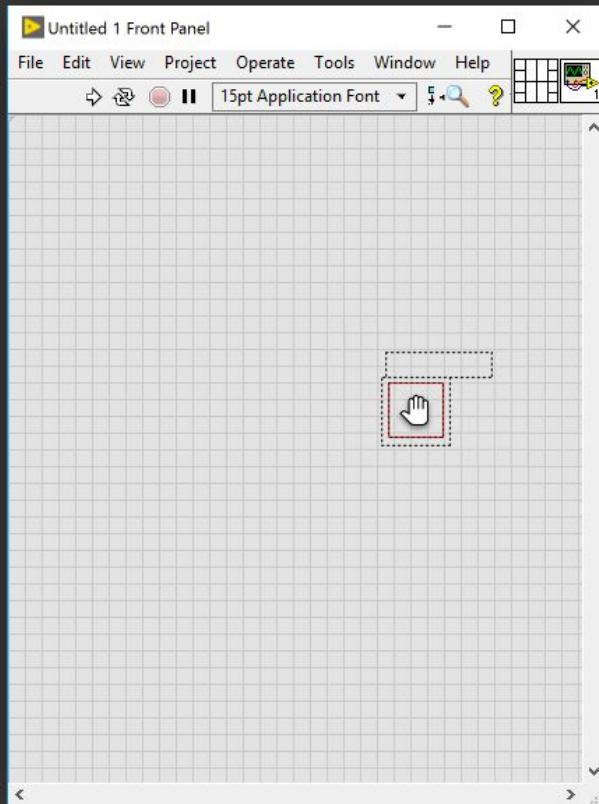
What's New in 2.0

- **Over 200 Custom Controls** that use a new “Material Design” style, in order to give LabVIEW UIs a much more contemporary look and feel.
- **Major Improvements to Buttons** so they are recolorable, resizable, and have hover effects
- **Integration with the JKI Design Palette** for a completely redesigned user experience, allowing easy search and use of the Flat UI Controls in your projects.



Design Palette

by JKI





**We'll talk more about Design Palette,
but let's look at the Flat UI Controls 2.0**



Buttons

Buttons



120x40 Buttons 27 items

40x40 Buttons 93 items

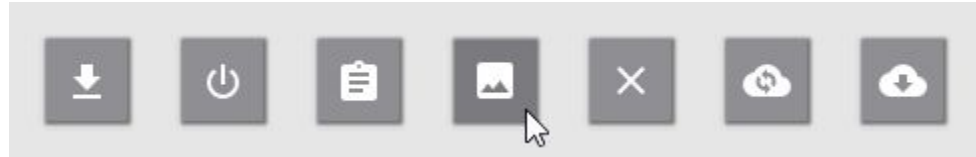
Transparent Buttons 50 items

40x40 Icon Only with Transparent Background



These appear as an icon, only, and then have a round background when hovering.

40x40 Icon Only




These look like what you might think of as a “traditional” buttons” (since they have a background, even when not hovering).

120x40 Icon and Text



These also look like “traditional” buttons” and are commonly used where space is plentiful and text descriptions of the button’s functionality are helpful to users (e.g. a Test Station where there can be no ambiguity about the functionality of a button).

120x40 Text Only Button



Text Only

It looks just like the 120x40 Icon and Text buttons, but does not have an icon -- only text, which you can change to be anything you like.

Strings and Numerics



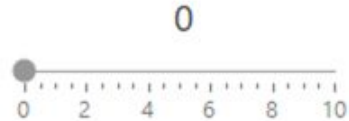
String

Numeric

Numeric

Numeric with units

Horizontal Slider



Vertical Slider



Path, VISA, Combo Box



Path



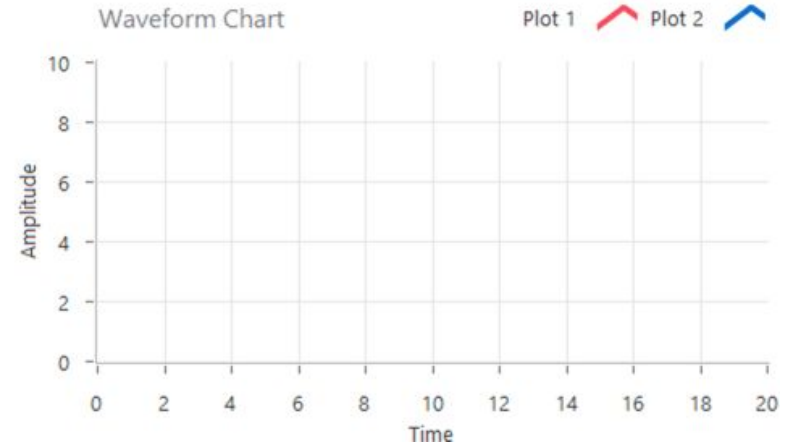
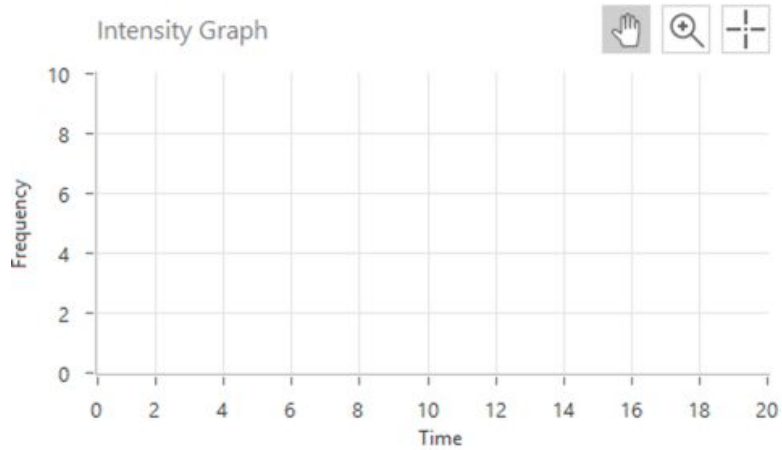
VISA resource name



Combo Box



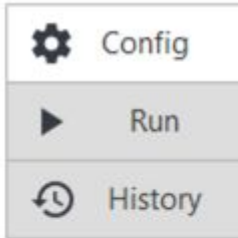
Graphs and Charts



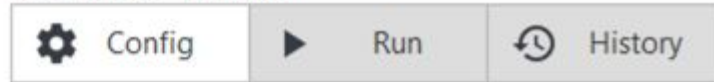
And More...



Radio Buttons - Vertical

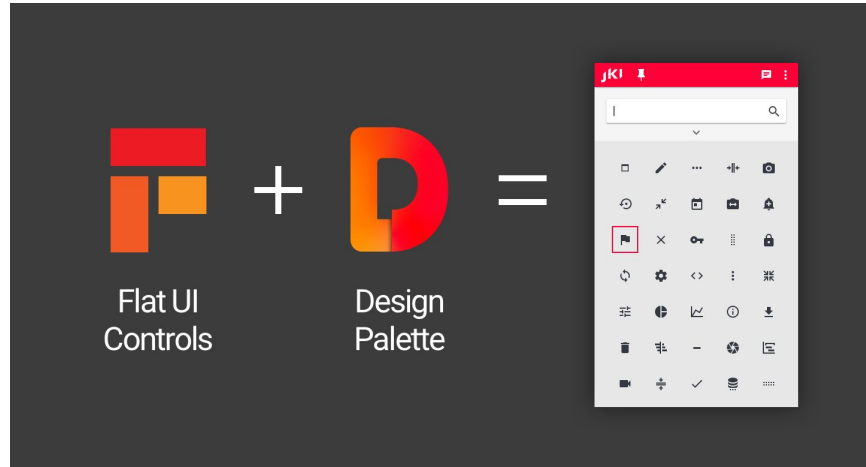


Radio Buttons - Horizontal

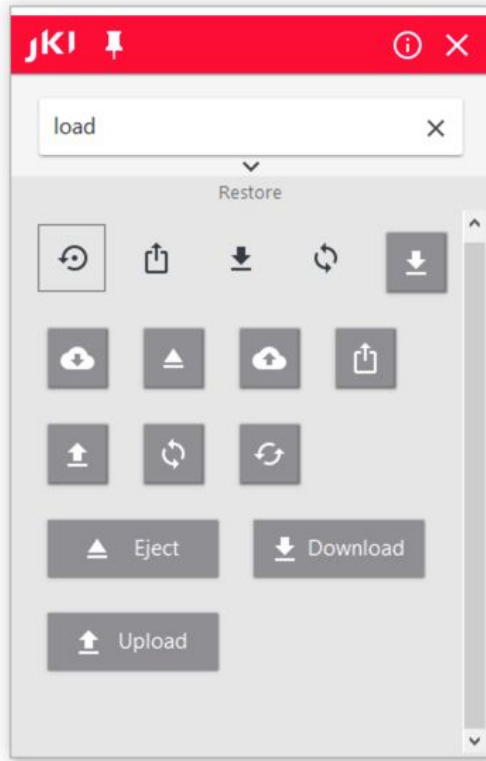


Borderless Cluster





Now, let's explore the Flat UI Controls using the JKI Design Palette.



Demo

JKI Flat UI Controls & Design Palette

Helps you build professional UIs

Easy to search for controls

Add your own controls themes

Get great tips on UI development

More to come...

Professional UIs in LabVIEW matter

**JKI Flat UI Controls and
JKI Design Palette are a big step forward**

Jim wants to help you get you get there

Visit blog.jki.net
for all the latest news

Thanks!

Please...

- visit jki.net/tools and download Flat UI Controls 2.0
- try out these new tools
- get new tips for UI development in LabVIEW
- email me at jim.kring@jki.net

