

Touch Encoder

Development Manual



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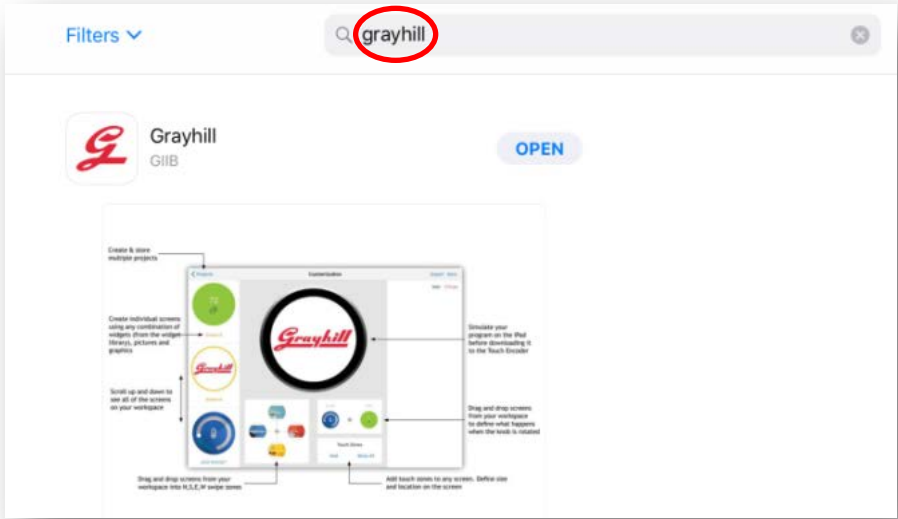
1 What's included?



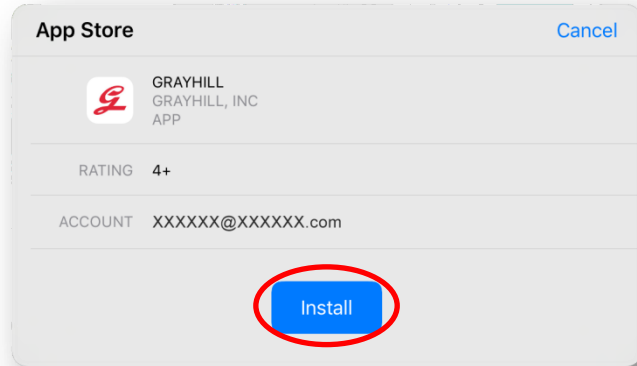
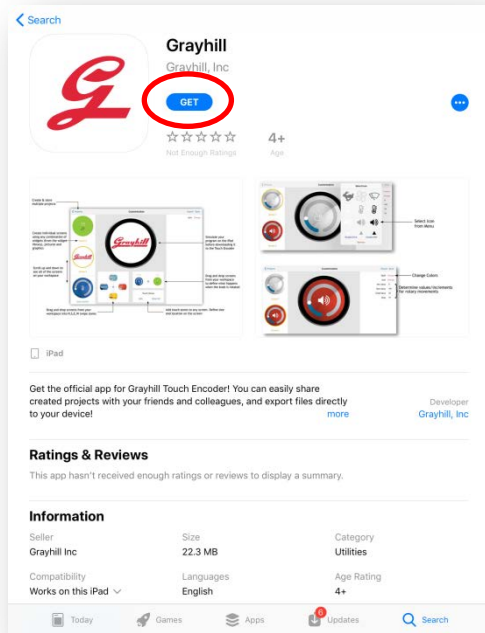
- 1. Touch Encoder Development Module
 - 2. CANbus Interface Cable
 - 3. Red Programming Cable
 - 4. Thumb drive
 - 5. Power Cable Assembly
 - 6. White USB Micro B to USB Type A Adapter Cable
- * iPad is included if tablet version is ordered

2 Download App

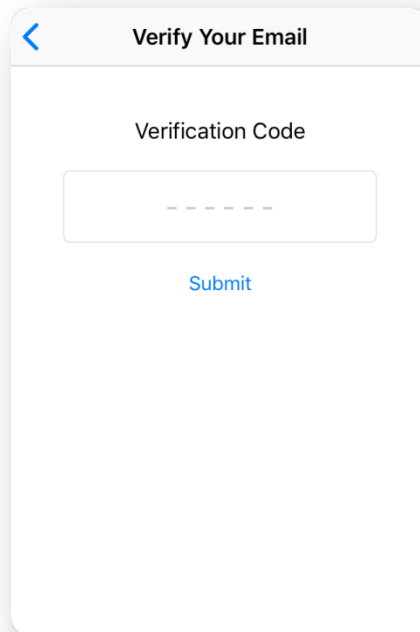
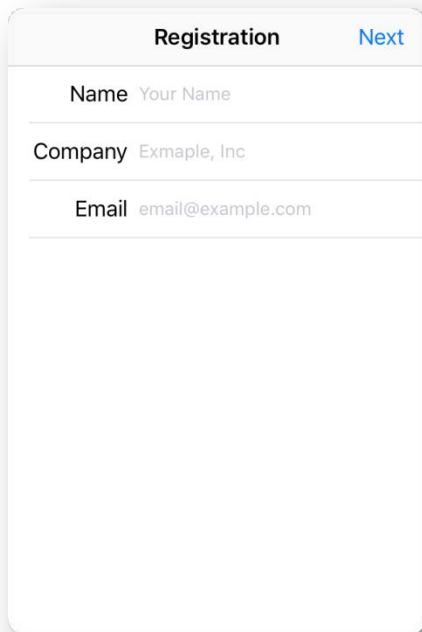
2.1 Find app on App Store with iPad



2.2 Download



2.3 Registration: Enter info and receive verification code in email

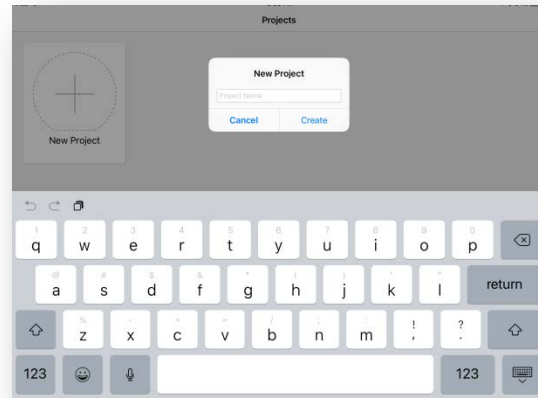


3 Create and Save a new project

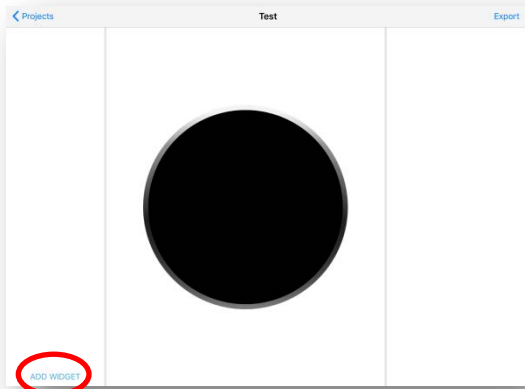
Open App



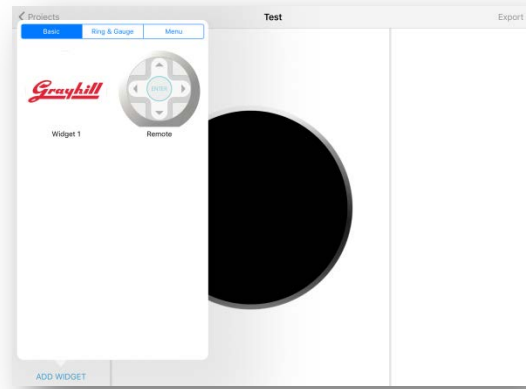
Name Project



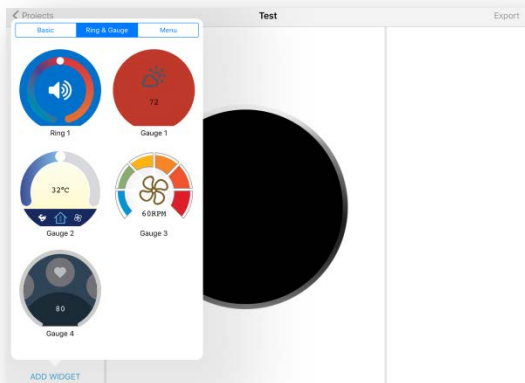
Add Widget



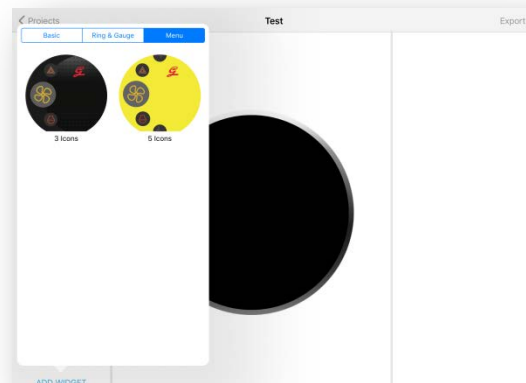
Basic Widgets



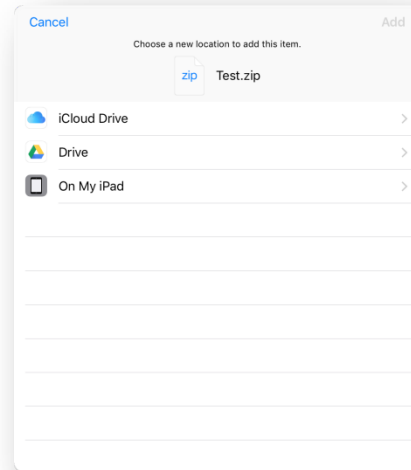
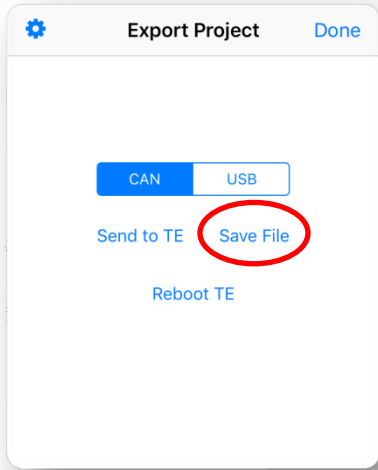
Ring & Gauge Widgets



Menu Widgets



Choose to save in iCloud, Google Drive, or on your iPad



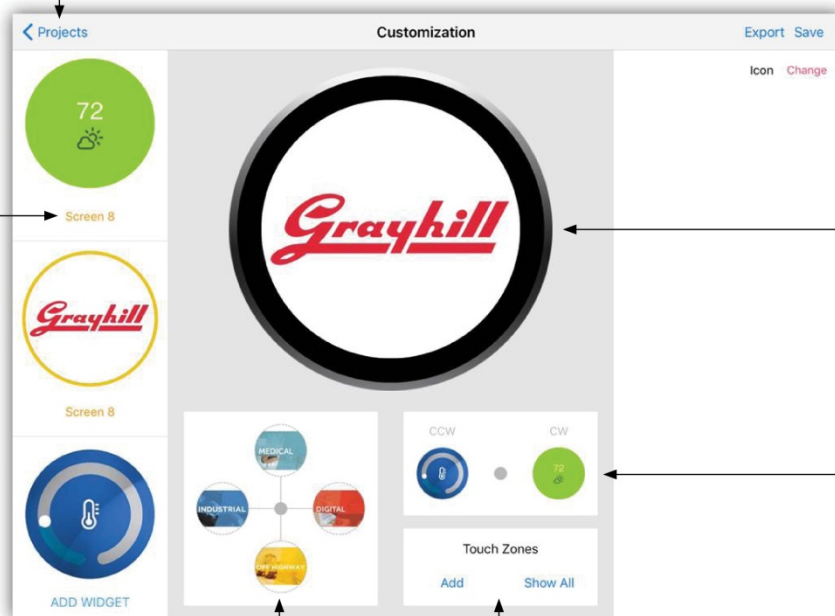
4 Basic App Navigation

Create & store multiple projects

Create individual screens using any combination of widgets (from the widget library), pictures and graphics

Scroll up and down to see all of the screens on your workspace

Drag and drop screens from your workspace into N,S,E,W swipe zones



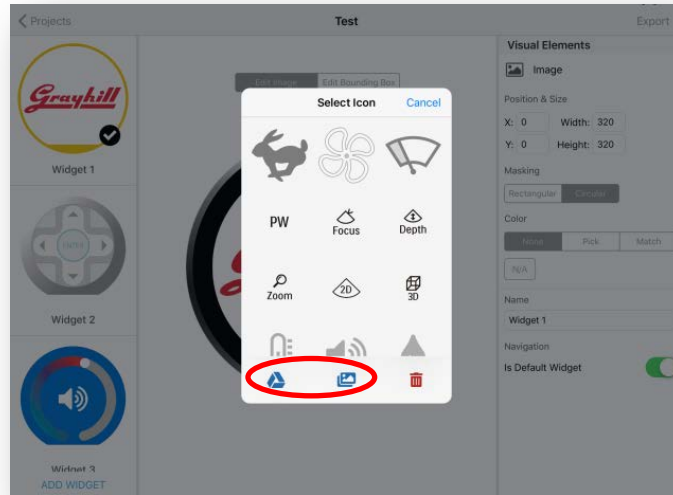
Simulate your program on the iPad before downloading it to the Touch Encoder

Drag and drop screens from your workspace to define what happens when the knob is rotated

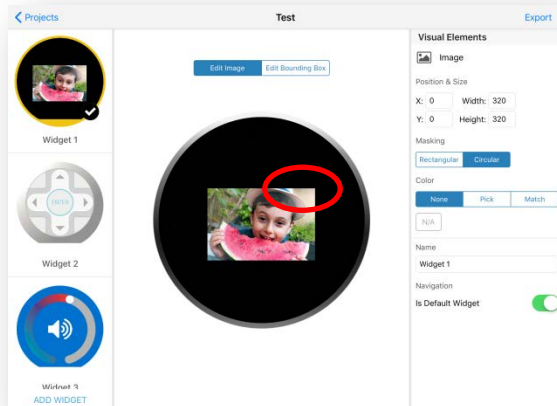
Add touch zones to any screen. Define size and location on the screen

5 Uploading and Sizing an Image

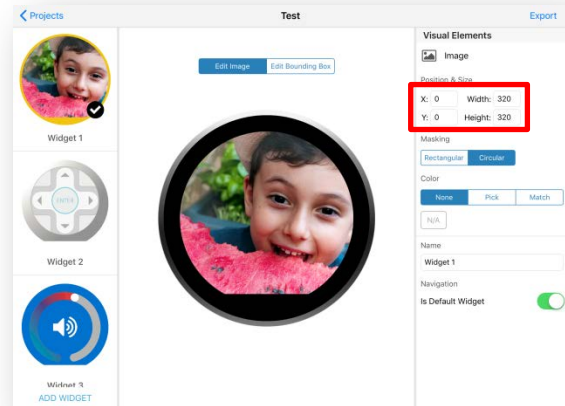
Use images from your Google Drive or Camera Roll



Select Image



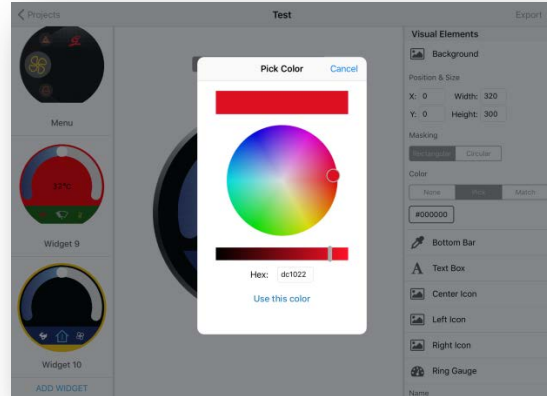
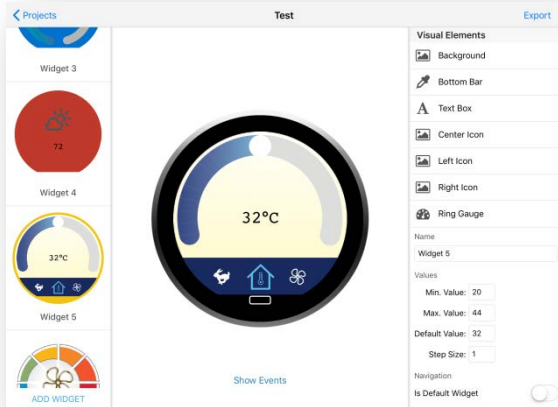
Reposition and Resize Image



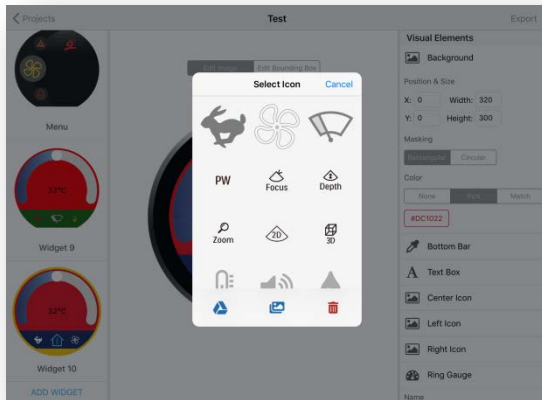
* Repositioning and resizing can be done by tapping and dragging on image corners or inputting locational and dimensional values

6 Widget Configuration

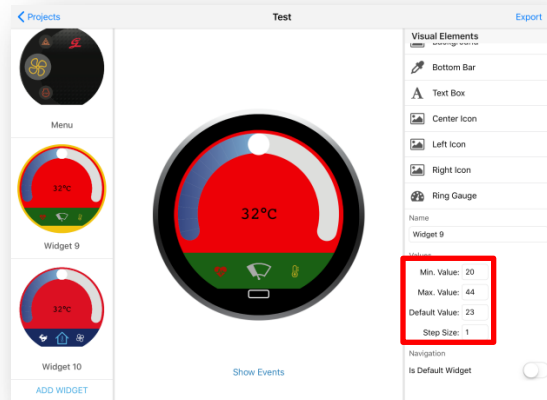
Pick any widget and select background colors



Choose Icons from Library

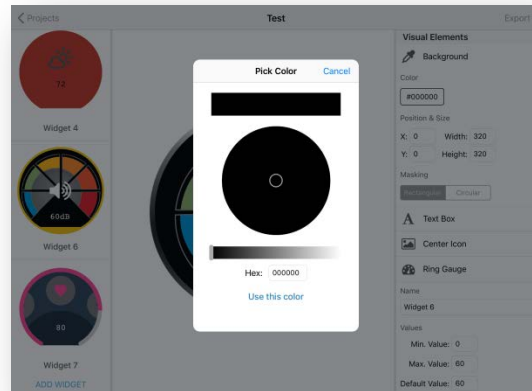
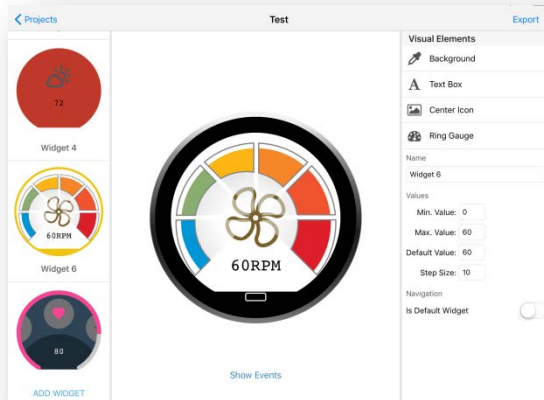


Customize Values

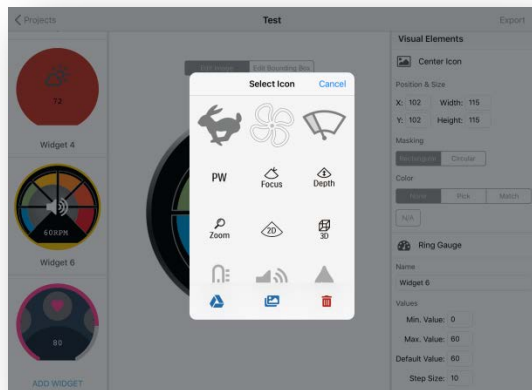


*** Customizable values include Max, Min, Default, and incremental Step Size**

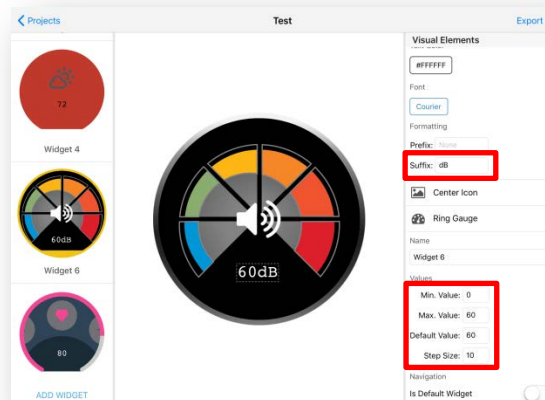
Pick any widget and select background color



Choose Icons from Library

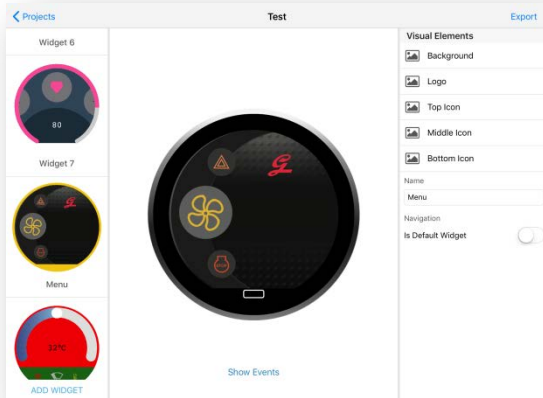


Customize Values

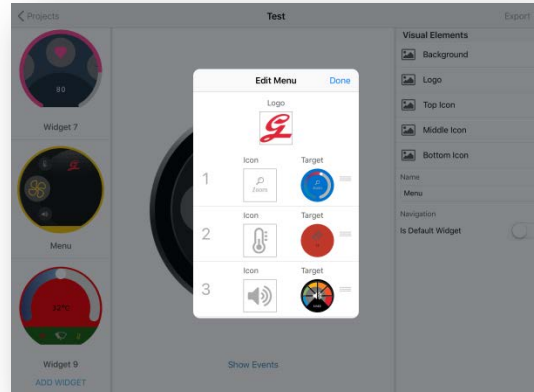


*** Customizable values include Max, Min, Default, incremental Step Size values, and Suffix (measurement unit)**

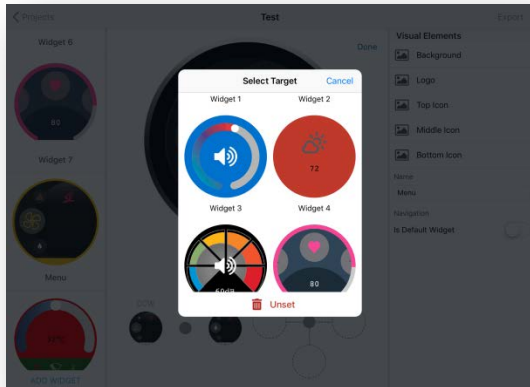
Select Menu Widget



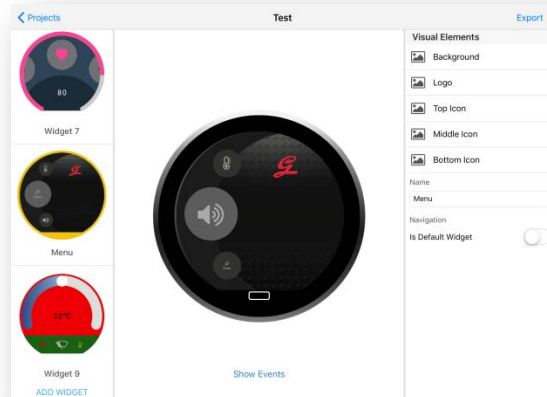
Customize Icons and Target Widgets



Choose Widgets from Workspace

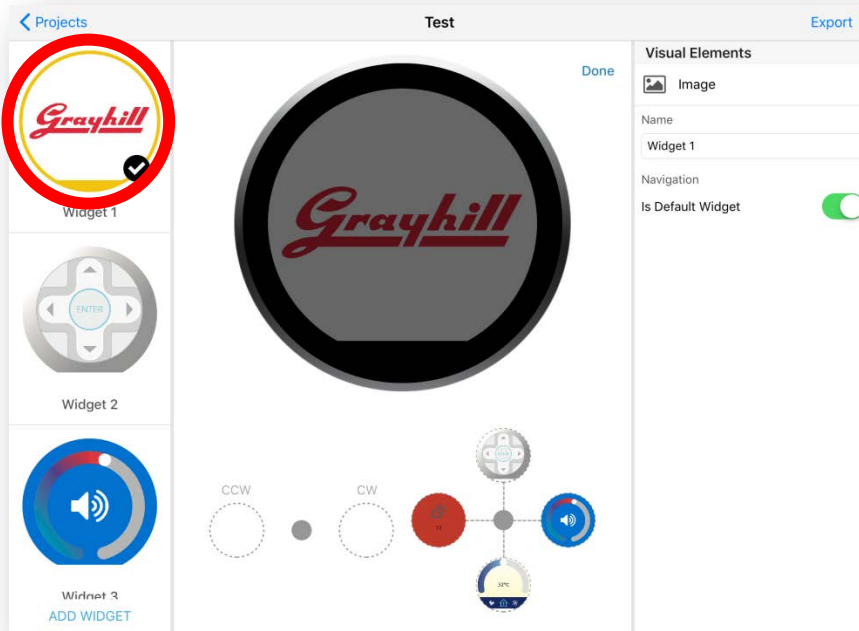


New Menu



7 Setting Home Screen

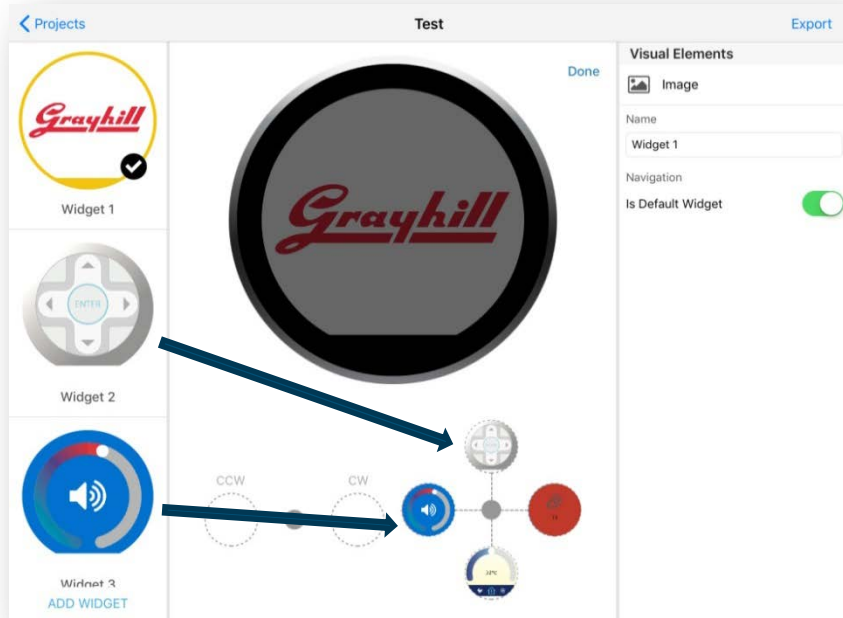
Double tap any widget to set as home screen



8 Defining Program Flow

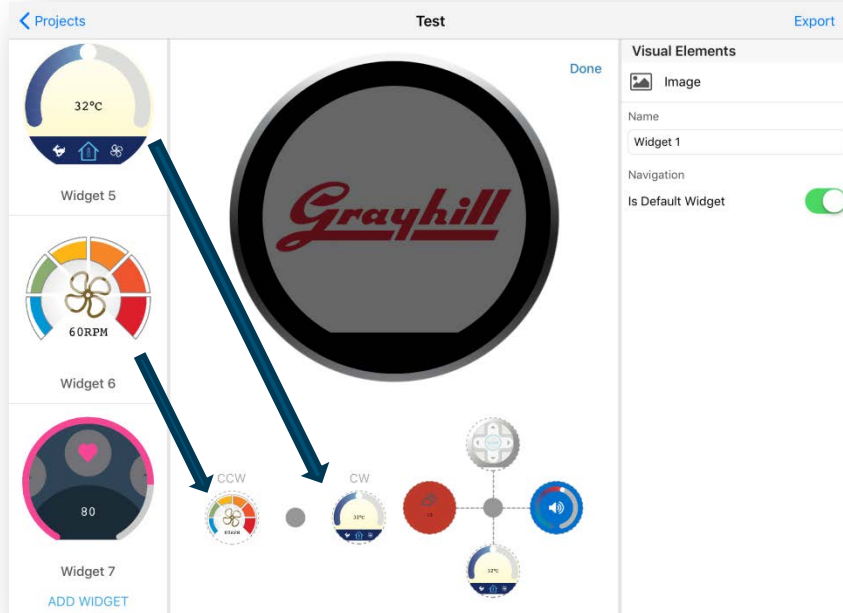
8.1 Swipe Logic

Drag and Drop any widgets to Up, Down, Left, and Right



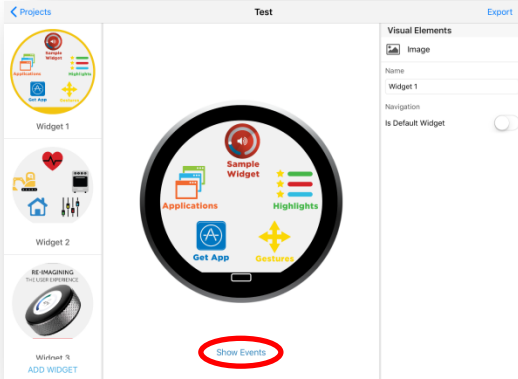
8.2 Rotation Logic

Drag and Drop any widgets to Clockwise and Counter-Clockwise target locations

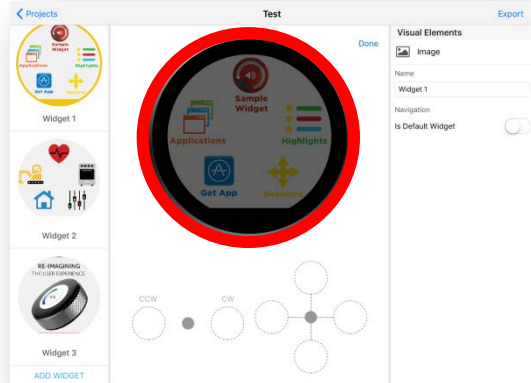


9 Defining Touch Zones

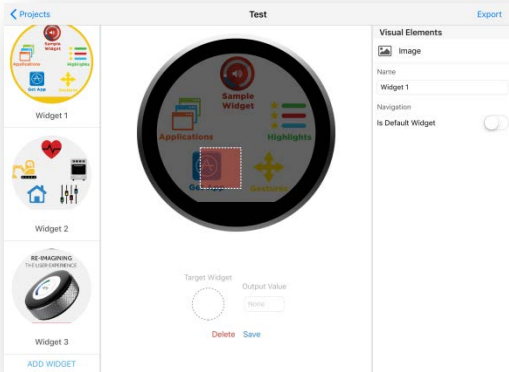
Tap on 'Show Events'



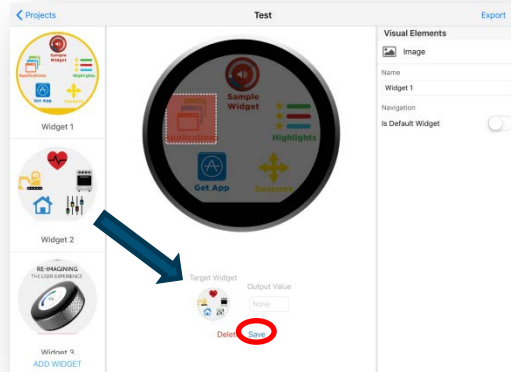
Tap anywhere on Touch Encoder Screen



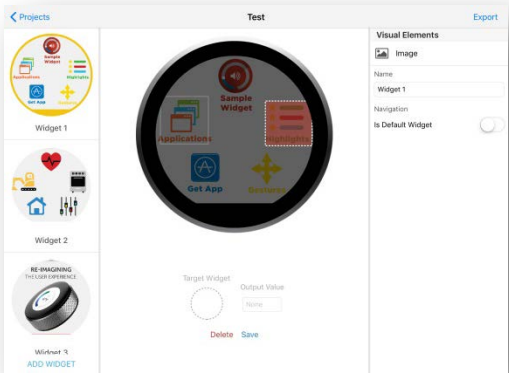
Drag corners to resize, and drag box to reposition



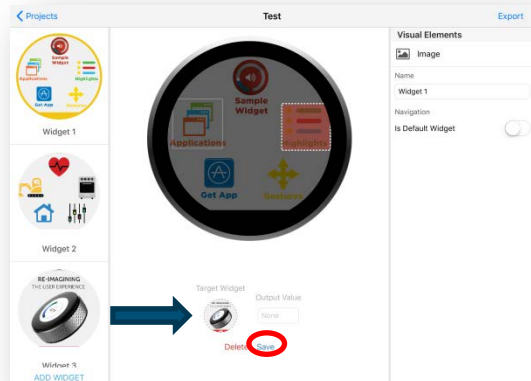
Drag Widget on the left to Target, and tap 'Save'



For more Touch Zones, Tap on screen again



Drag Widget on the left to Target, and tap 'Save'



10 Download Program to SDK via USB

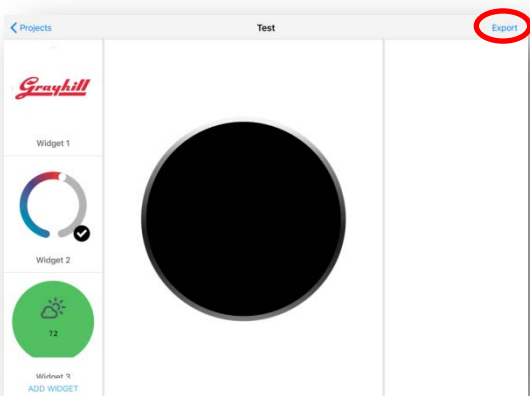
Plug in USB



Open App



Tap on 'Export'

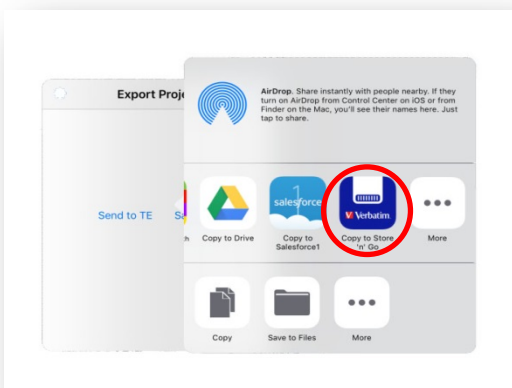


Tap on 'Save File'



Note to select between CAN or USB Output Interface

Tap on Storage Icon



Connect USB to Red Cable, Power on

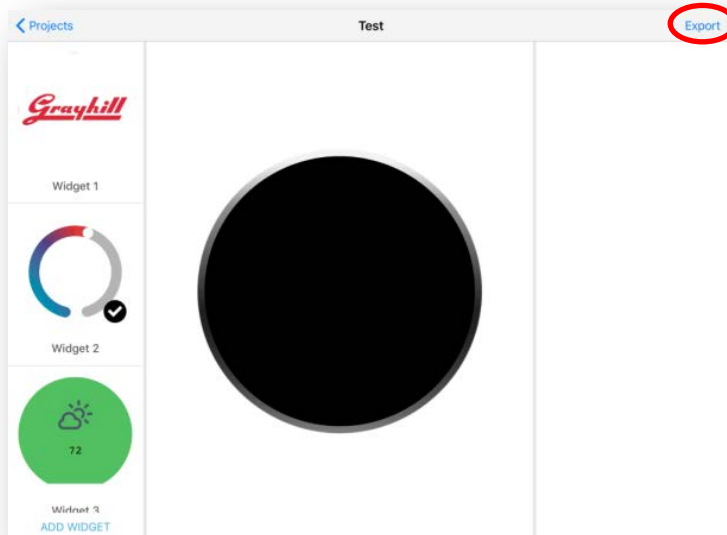


Follow Instructions. Once update is complete, reboot SDK by removing power cable for at least 5 seconds

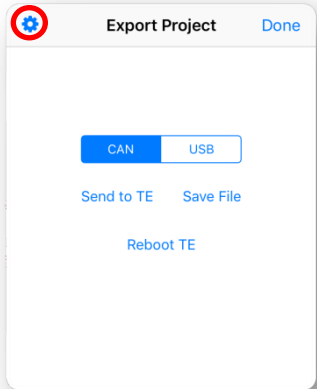


11 Download Program to SDK via Wi-Fi

Tap on 'Export'



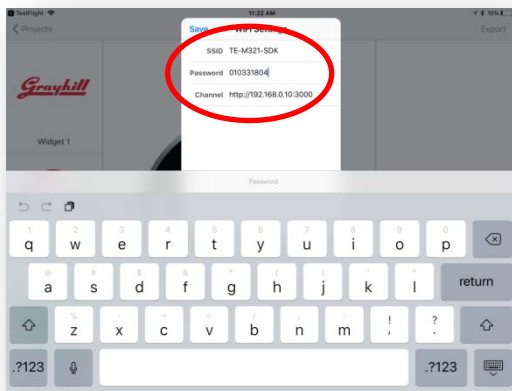
Tap on top left 'Settings'



Model Number and Serial Number



Input from previous step and save

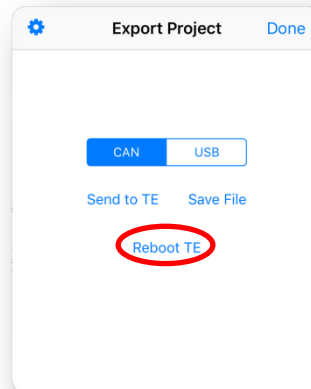
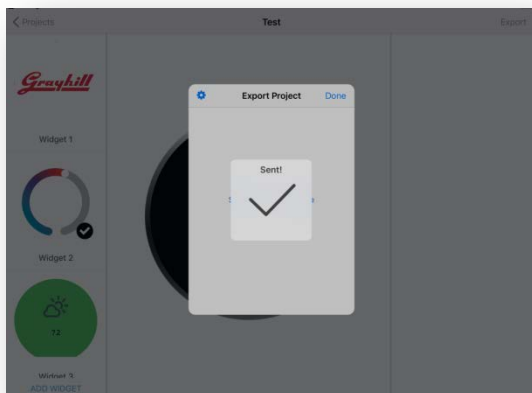


Tap on 'Send to TE'



Note to select between CAN or USB Output Interface

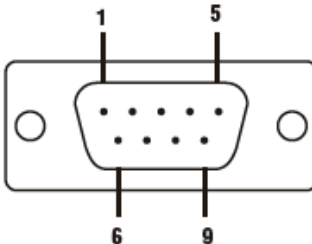
Follow Instructions on SDK. Once update is complete, reboot by tapping on 'Reboot TE'



12 CANbus Interface Pinout

PIN	Signal
2	CAN L
3	CAN GND
5	Shield
7	CAN H

DB9 male



The diagram shows a DB9 male connector with a central shielded area. Four pins are labeled: pin 1 at the top left, pin 5 at the top right, pin 6 at the bottom left, and pin 9 at the bottom right. The connector has two circular mounting holes on either side.



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About Grayhill

Grayhill, Inc. is a privately held firm which designs and manufactures intuitive human interface solutions that make life simpler, safer and more efficient. Standard products include optical and Hall Effect encoders, discrete and Hall Effect joysticks, rotary switches, keypads, and pushbuttons; all with finely tuned haptics. Grayhill specializes in creating ergonomic panels and product shells that integrate various interface technologies, including displays, our components, and gesture recognizing multi-touch technology. With headquarters in La Grange, Illinois, and multiple state-of-the-art facilities around the world, Grayhill's team has the full engineering, product development and manufacturing expertise to deliver both standard and customized products quickly and cost-effectively. To learn more about Grayhill's products and capabilities, visit www.grayhill.com.