



Project

Sleeker, smarter, more intuitive. VCC's touch sensor displays deliver all the above

Application Characteristics

Thermostats and other home devices have evolved over the last few years, getting not only smaller, but smarter and more connected. The consumer demand for intuitive and convenient products that make their lives easier are driving the change.

With thermostats like Nest and Honeywell, users can program and control temperatures from their phone, even when they're still at work. But these devices do so much more than control temperatures. They monitor energy consumption, providing peace of mind and control, as well savings on utility bills.



And the heavy lifting for these smart home components happens in the interface. With fewer buttons, these high-tech controls are often high-touch.

That's where VCC's innovation comes in.

Application Requirements

The next generation of smart home devices must:

Be easy-to-operate

No one has time to break out the instruction manual. These smart thermostats and other devices must be simple to understand and operate without any instruction.

Include high-tech features

a simple programming interface that incorporates touch sensors is a must for smart home devices. Through the use of capacitive touch sensor displays and intuitive icons, consumers can quickly adjust temp settings to their liking with a few touches or swipes.

Support sleek design

Today's customers expect the simplicity and aesthetic of Apple products, so clunky thermostats and other home devices won't cut it. The smaller, less obtrusive in the home the better. And illuminated components enable sleeker design with smaller footprints that help support the modern look and lifestyle.

VCC is leading the way in capacitive touch (CTH) sensor display technology designed to enhance smart home device design.

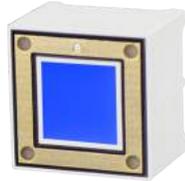
Our innovative portfolio that is well-suited for smart thermostats and other home product includes:

Are you ready for next level illuminated components?

CTH Series

The CTH Series touch sensor displays eliminate the need for a traditional on/off switch while providing uniform illumination. With 15mm x 15mm x 11mm through-hole design, the CTH Series enables reliable visual communication in a range of colors including super red, yellow, blue, pure green and white, with or without standard icons.

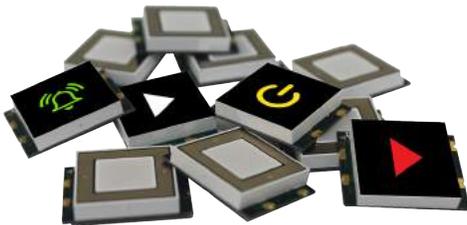
These high-clarity LEDs have already gained recognition in the UK and Europe, making the list of finalists in the 2017 Elektra Awards' "LED Lighting Product of the Year" category.



CSM Series

VCC recently upped the ante in CTH design possibilities by launching the CSM Series — the industry's smallest CTH touch sensor displays. The CSM Series Capacitive Touch Sensor Displays are unique because they measure only 15mm x 15mm x 3.2 mm and can be surface-mounted or even reverse-mounted to save additional space on the device.

The CSM Series LEDs are available in green, yellow, red, blue and white.



All of VCC's capacitive touch sensor display products provide:

- **Reliable operation** - whether user has a dry or damp finger, or is wearing touchscreen-compatible gloves
- **Enhanced visual communication** - standard icons are available in on, off, alarm and arrow, but custom icons can be created to accommodate any design
- **Design flexibility** - a thin acrylic or glass overlay can be placed over the touch sensor to further customize the design

Results & Benefits

VCC's illumination technology provides many benefits for the manufacturer and the end user:



For the manufacturer:

- **Longer device life, improving quality** - because CTH displays do not require mechanical on/off switches, they last longer than traditional indicators so manufacturers can deliver a higher-quality, longer-lasting product.
- **Greater design flexibility** - by offering smaller capacitive touch sensor display sensors that can be mounted in a range of ways, VCC opens up many design possibilities.

For the consumer:

- **Better user experience** - easy and intuitive design
- **Enhanced convenience** and energy efficiency
- **Sleeker design** - complements the modern home aesthetic

As home devices become smaller and more intuitive, VCC will be there to deliver the innovative products to help shape the next wave of smart home product design.

Are you ready for next level illuminated components?