

Custom Display Capabilities



We Can Meet the Specifications of Your Custom Display Project

For many customers, customization is a chief means of product differentiation. Planar offers a full range of custom capabilities, from something as simple as adding a logo to a bezel or including MIL-spec cables and connectors on a standard part, to a complete ground-up design involving special graphics, installing touch sensors, ruggedizing with a special enclosure and/or improving clarity with optical bonding.

We match existing display technology with our engineering and production expertise to achieve superior results. Our experience with a diverse range of markets and applications accelerates the development of a display that matches your specifications, while removing many of the frustrations of developing the display yourself.

Complete our interactive “Guide to Your Display Project” at www.planarembded.com/guide for help defining the specifications of your next project.

www.planarembded.com/guide



Need something custom?
Visit our online interactive guide for help defining your custom display.

PLANAR PROVIDES

1. Design, engineering and manufacturing processes optimized for custom displays
2. Combine the quality systems of large vendors with the flexibility of small vendors

Your product and your application are unique. Standard solutions may not provide the differentiation your product needs and the performance your customers require.

BENEFITS

- Accelerate the development of a display that matches your specifications
- Remove many of the frustrations of developing the display yourself
- Learn from our 27 years of developing rugged, custom and embedded displays

CUSTOM DISPLAY CAPABILITIES

Get the Exact Display You Need

PERFORMANCE FILMS AND ENHANCEMENTS

- Optical bonding
- Anti-glare and anti-reflective film lamination to minimize surface reflections
- Vandal glass
- High bright backlights

DISPLAY COMPONENTS

- LCD selection
- Touchscreen integration
- Inverters
- LED backlights
- Video boards
- NVIS filters
- Multi-touch

CUSTOM ENCLOSURES AND BRACKETS

- Waterproof, dustproof, ruggedized enclosures
- Bezels (metal or plastic)
- Mounts
- Chassis
- Stands

HARDWARE

- Specialty video and power cables
- Military grade connectors
- Embedded computing
- Panel PC customization, including BIOS

CUSTOM CERTIFICATIONS

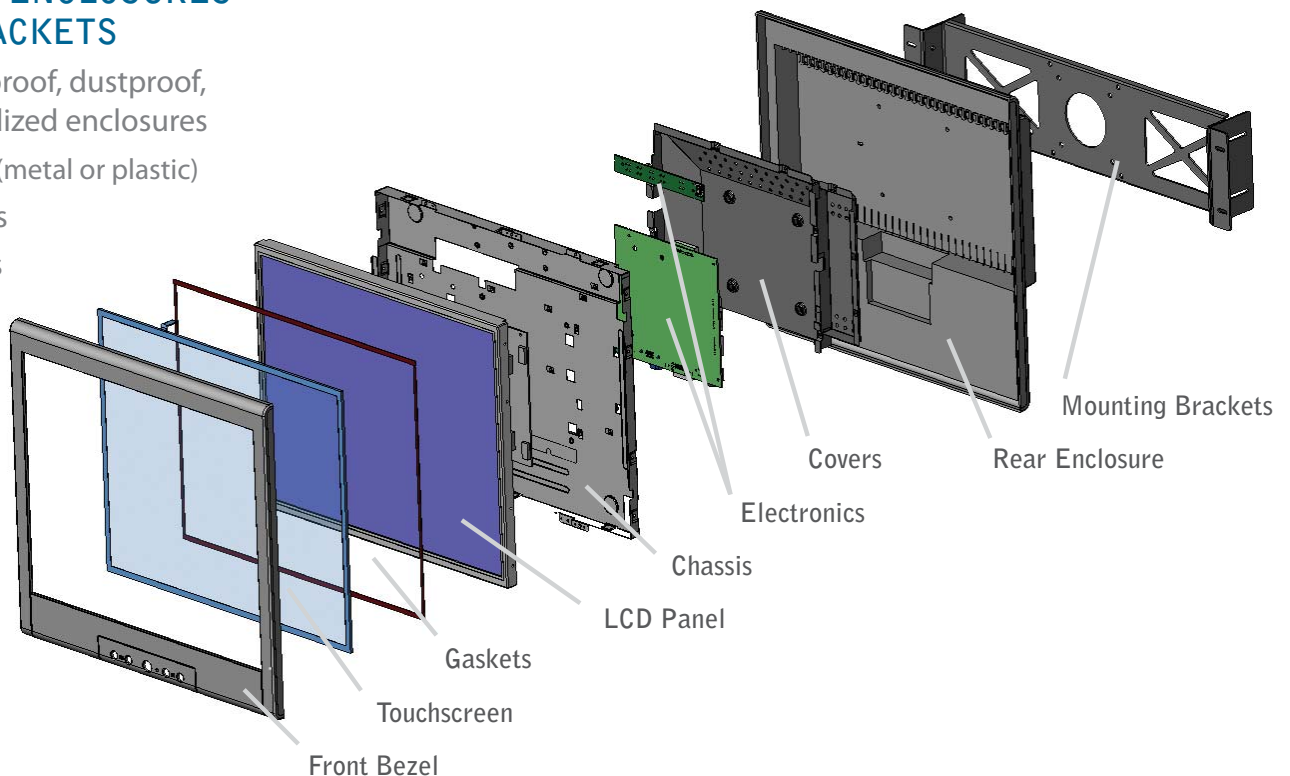
- UL
- Hazardous environment
- FCC
- Mil-Std
- IP and NEMA rated

EXTENDED TEMPERATURE

- Cooling kit for solar loading abatement
- IR blocking glass
- Heaters

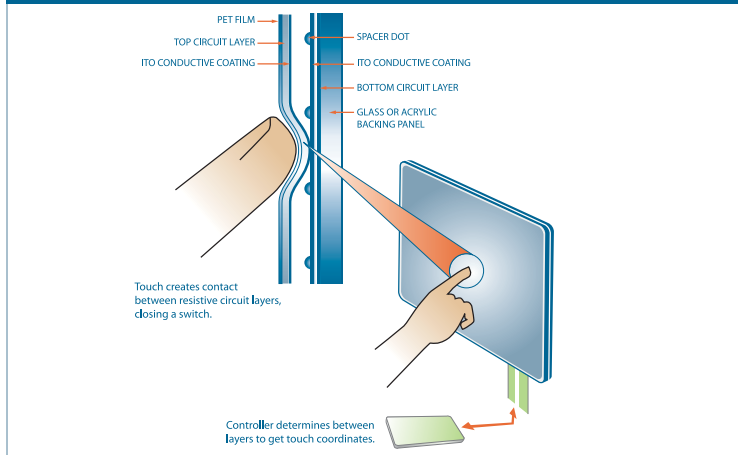
PROCESS

- Test reports
- Industrial design
- Rapid prototyping
- Display characterization testing

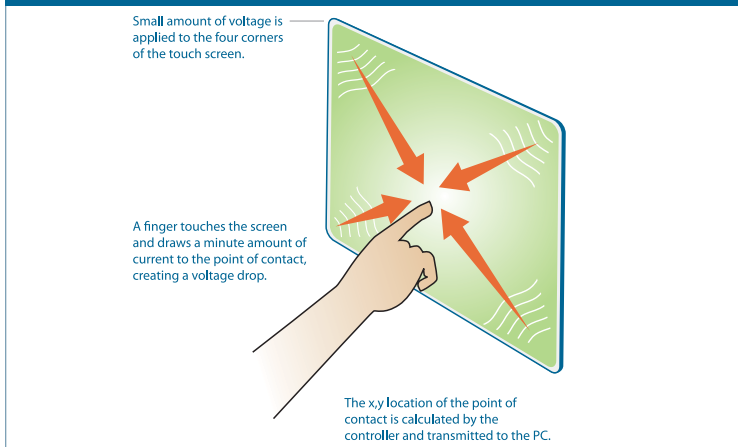


TOUCH SCREEN TECHNOLOGIES

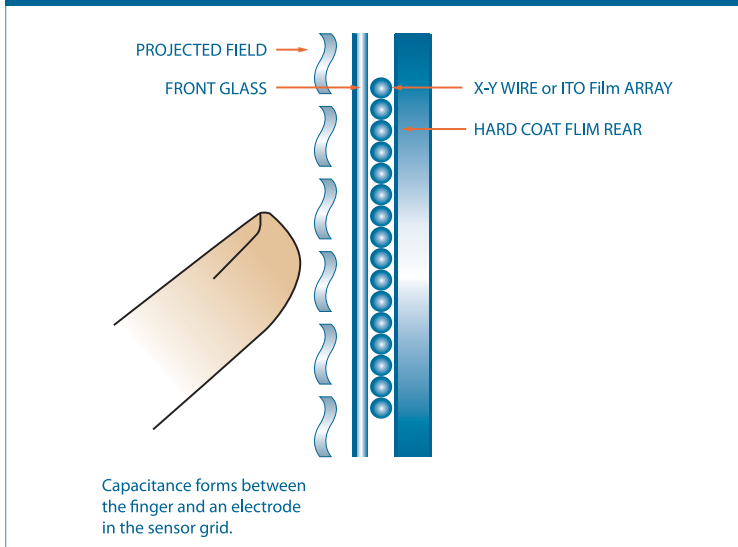
How RESISTIVE Touch Works



How SURFACE CAPACITIVE Touch Works



How PROJECTED CAPACITIVE Touch Works



RESISTIVE

- Cost-effective solution
- Activated by a stylus, finger, or gloved hand
- Functions even if damaged
- Applications:
 - Healthcare
 - Hospitality
 - High-volume retail environments

SURFACE CAPACITIVE

- Durable and resistant to scratches, great for demanding applications
- Faster and more responsive than resistive
- Immune to surface contaminants
- Superior optical clarity for a brighter display and less surface reflection
- Applications:
 - Casino Gaming
 - Retail
 - Hospitality

PROJECTED CAPACITIVE

- Outdoor operability - in rain, snow, ice and dust
- True flat front surface possible with no bezel
- Activated by gloved hand
- Functions even if glass is scratched or broken
- Applications:
 - Outdoor kiosks
 - Ticketing machines
 - ATMs

SURFACE ACOUSTIC WAVE (SAW)

- Durable glass construction
- High optical clarity
- Activated by a finger, gloved hand or soft tip
- Applications:
 - Healthcare
 - Retail
 - Point of Sale
 - Hospitality

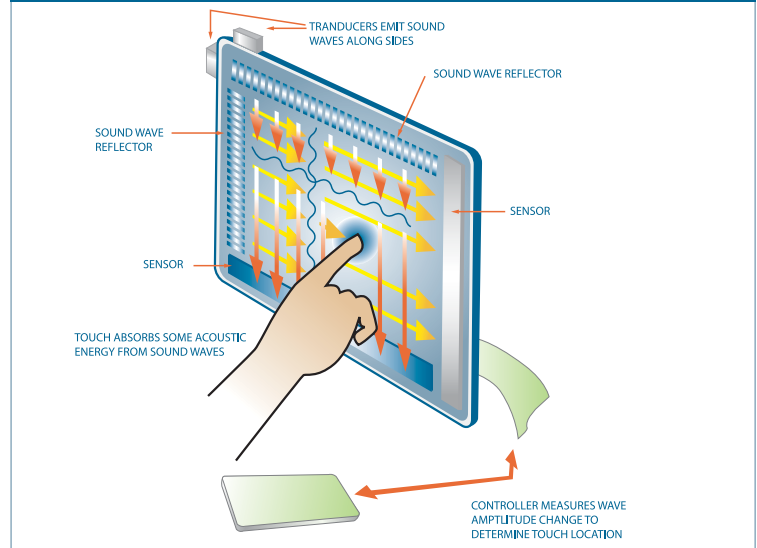
INFRARED

- Durable and resistant to scratches, great for demanding applications
- Activated by a stylus, finger, or gloved hand
- Functions even if damaged
- Applications:
 - Healthcare
 - Hospitality
 - High-volume retail environments

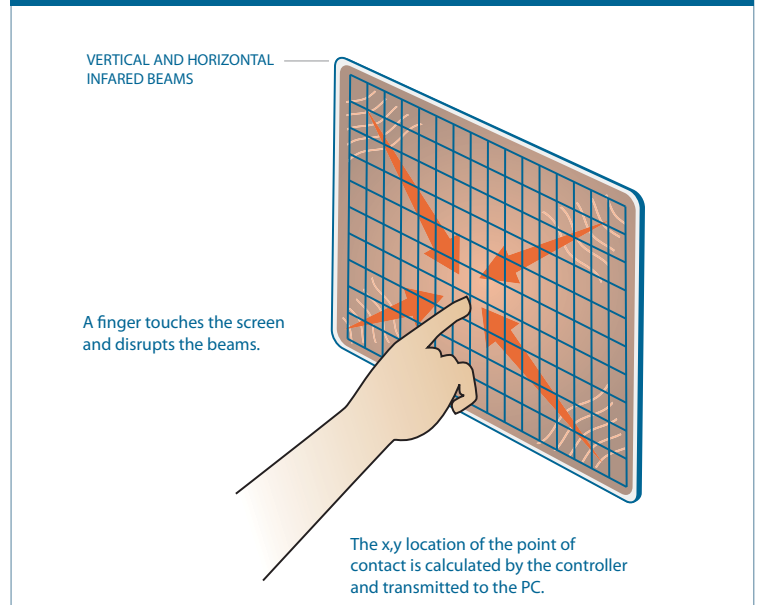
OPTICAL

- Clearer than resistive or capacitive since there is nothing between the viewer and the display
- The rugged surface and bezel design is ideal for sealing against liquids and dust
- Able to handle dual touch input
- Can scale to large sizes
- Can support multi-touch (more than dual touch)
- Applications:
 - Kiosk and interactive digital signage
 - Indoor multimedia kiosks

How SURFACE ACOUSTIC WAVE Touch Works



How INFRARED Touch Works



	INFRARED (IR)	OPTICAL	RESISTIVE (5-WIRE)	SURFACE CAPACITIVE	PROJECTED CAPACITIVE	SURFACE ACOUSTIC WAVE (SAW)
Gloved Hand	Yes	Yes	Yes	No	Yes	Yes
IP 65/NEMA 4 Seal Capable	Yes	Achieved with correct seal material	Yes	Achieved with correct material	Yes	No
Durability/Wear	Excellent	Excellent	Fair	Good	Excellent	Excellent
USB Interface	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Stability	Excellent	Excellent	Fair to Excellent	Good to Excellent	Good to Excellent	Excellent
Light Transmission	92-99%	92-100%	75-88%	88-93%	≤91%	90%
Multi-touch Capable	Yes	Yes	No	No	Yes	Yes