CSI KEYBOARDS, INC.



Quality Custom Membrane Switches On Time. On Budget.

Industries Served:



Company Overview:

Whether you need basic membrane switches, graphic overlays and nameplates, rubber keypads, touchscreens, flex circuits, or full assemblies, CSI can provide you with the most comprehensive designs and competitive pricing in the industry. Our membrane switches are designed and manufactured here in the USA so that they are built to the highest standards. Building our keypads locally in Massachusetts allows us to control both the quality and delivery of our products, ensuring a quick turnaround for prototypes and shorter lead times for production parts. CSI has been providing membrane keypad design and manufacturing expertise for over 30 years. This experience allows us to take your concepts and bring them to life quickly, meeting tight schedules when required. Based locally in Massachusetts, we build our membrane switches in the USA to guarantee the quality and reliability that our customers expect from their keypads.

CSI products can include the following capabilities:

- · Tactile metal dome membrane switches
- · Non-tactile membrane switches
- · Printed circuit board based membrane switches
- Full "plug and play" interface assemblies
- Rubber keypads (silicone/elastomeric)
- · Copper flex circuits (etched Kapton)
- · Backlighting capabilities using LEDs, EL Panels, Fiber Optics, or Light Guide Film technology
- · Embedded touchscreens
- · Environmentally sealed

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PRESS RELEASE

Backlit Environmentally Sealed Switch:

CSI Keyboards was asked by our customer to design a backlit keypad assembly that would withstand the destructive temperatures of the arctic as well as the dry heat of the desert without these extremes degrading its functionality. The reliability of these switches was paramount as they were to be used as lighting controls for temporary military field housing.

CSI recommended an assembly consisting of a silicon rubber keypad, a Kapton etched circuit, and silicon adhesive based on the bullet points below:

- · Silicon rubber is extremely durable and performs well in all temperatures.
- Etched copper circuitry on Kapton film is a more durable material than silver ink on polyester, able to withstand moisture and extreme temperatures.
- Silicon adhesive is extremely durable and reliable regardless of extreme temperatures or wet environments.

After approval of the proposed design, CSI produced first articles for test and qualification. These were tested to expanded temperature standards and have been qualified from +150 C down to -50 C. After test and qualification our customer went into production with our design. Over the first 2 years of production they have experienced o field failures.

If your application needs to be reliable and stable in extreme temperatures, CSI Keyboards is the supplier to partner with.





