CLICKTOUCH® Technology

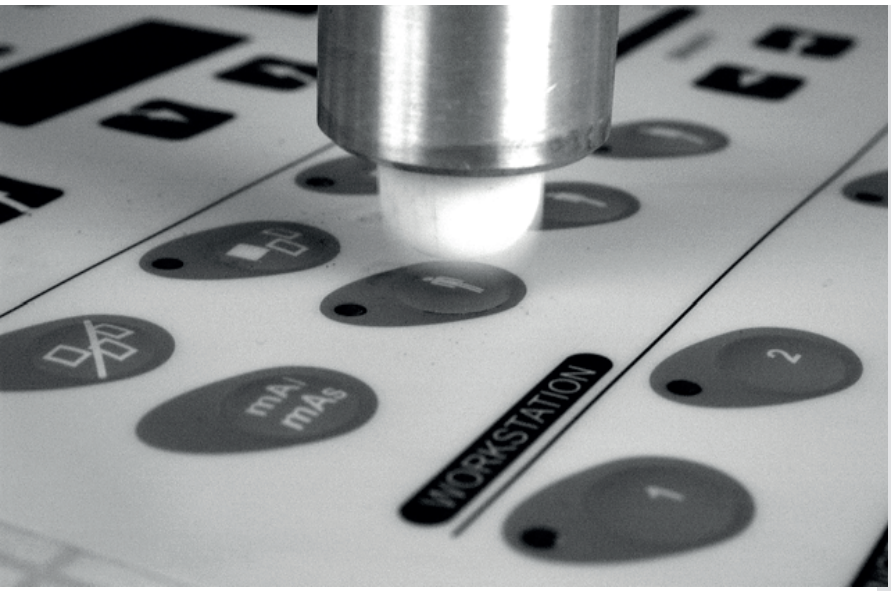
Amazingly simple. Incredibly functional.

CLICKTOUCH® offers a number of advantages over conventional membrane or metal dome based keyboards. The combination of a thermoformed polyester foil with “elastic” spring zones enables extended key travel and a contact bounce that is considerably better than the industry standard. The long key travel provides improved tactile feedback; even when operated by someone wearing gloves, a clear click can be sensed.

CLICKTOUCH® retains essentially the same ergonomic performance as standard mechanical push buttons, but demonstrates the added benefits of being dust and water tight, as well as chemically resistant. Circuit layers are printed on polyester substrates with special silver, carbon and insulation inks, with additional protection against oxidation provided by over-printing with carbon or “Chemfight” (anisotropic conductive ink).

Key Features & Benefits

- Long lasting: in excess of 5 million actuations
- Long travel: up to 2 mm (0.079”)
- Low contact bounce of < 10 ms (depends on key design)
- A wide range of key diameters are available
- Precise «click» action
- Activation force variable from hard to soft
- Operating temper atu re from -40°C to 67°C (-40° F to +153°F)
- Resistant to dust, water, abrasion & most chemicals
- Cost effective



"**CLICKTOUCH®** retains essentially the same **ergonomic performance** as standard mechanical push buttons, but demonstrates the added benefits of being **dust and water tight**, as well as **chemically resistant**".

We offer integrated solutions for a wide range of custom built systems.

We offer integrated solutions for a wide range of custom-built systems, which can incorporate components and options including:

Double touch keys

We offer keys with a double function. When pushing the key normally, the operator receives the normal click and function as the first contact closes. When pushing harder, a second, non-tactile contact closes, registering another function.

Sensor keys

We have developed a technology for making flat keys as large as required. No matter where you push on these large-surface keys, you make contact.

Surface Mounted Components

Our LEDs are available in several colors and different brightness, and can be fully integrated into keyboards. The LED window can be embossed to increase the viewing angle. We can also integrate all types of electronic components.

Embossing

A wide range of embossed features and finishes are available.

Display Windows

Display windows for a variety of functions can be incorporated into the keyboard design. For example, transparent windows for LCD displays or filter-coloured windows for LEDs and LED displays can be added. Deadfront, light smoke or selective structures can also be used for different design purposes. Windows can be protected against scratches and marks through the use of our HardCoat varnish layer, giving keyboard windows excellent protection against wear and tear.

Insert labels
To quickly and economically customize a keyboard for increased versatility, we offer “re-legendable” keyboards, where an insert label is placed under the overlay.

Backlighting
An integrated EL lamp can allow keyboard surfaces or individual keys or groups of keys to be illuminated. We can also supply either EL or fibre optic lamps as stand-alone products.

Scratch/wear resistance
We offer additional protection for surfaces and keyboard windows with PhotoCure structuring and HardCoat display window protection. PhotoCure is surface structuring varnish providing unprecedented wear, chemical and scratch resistance, together with a high quality visual appearance.

EMI/RFI/ESD shielding
EMI/RFI/ESD shielding prevents electromagnetic or radio frequency emissions from leaving or entering the equipment. Depending on your application, we can offer a wide choice of customised solutions.

Graphic Design
At E2IP Technologies we can give you full assistance in designing and developing effective interface solutions. We transform your specifications into drawings containing a complete mechanical, graphical and electrical description of the keyboard with the aid of CAD technology.

Technical Specifications

ELECTRICAL

Contact resistance (Pitc h : 0.039”, 1mm width)	1.25 Ohms/in (0.5 Ohms/cm)
Contact bounce	<10 ms
Insulation resistance	100 MOhms
Capacitance	<20 pF between 2 traces
Switchable power	300 mW maximum (max : 30 V, 30 mA)
Interface	Contact pads, ZIF tail and other options available on request

ENVIRONMENTAL

Storage Temperature	-40°F to +176°F (-40°C to +80°C)
Operating temperature	-40°F to +153°F (-40°C to +67°C)
Sealing	Up to Nema 4X (IP67)
Chemical resistance	Excellent resistance to most common materials: ethanol, alkali (50% caustic soda), battery acid (30% sulphuric acid), methanol, hydrochloric acid (3N), Citric acid (1N), antifreeze, insecticide, cola, disinfectant, motor oil, detergent...

MECHANICAL

Key design (diameter)	0.236" to 1.378" (6 mm to 35 mm)
Key travel (distance)	0.031" to 0.079" (0.8 mm to 2.0 mm)
Key actuating pressure	1N to 6 N (100 g to 600 g) (3.6 oz to 21 oz)
Switching life	Up to 5 m illio n actu ations
Connector pitch	0.100", 0.050" or 0.039" (2.54 mm, 1.27 mm or 1.00 mm)
Typical switch thickness	0.014" to 0.079" (0.35 mm to 2.00 mm)

Transforming the surfaces we touch in our everyday lives.

For more information, speak with a specialist at e2ip technologies.

We're always looking forward to hearing from you!

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TECHNOLOGIES