

Membrane Switch

Membrane switches are user-equipment interface utilities that allow for the communication of commands from users to electronic devices. Membrane switches can be thought of as one category of interface utilities alongside touch screens, plastic keyboards, toggle switches and many other kinds of control systems. Interface utilities can be as simple as tactile switches for controlling lighting, and they can be as complicated as membrane keyboards and switch panels for use with computers.

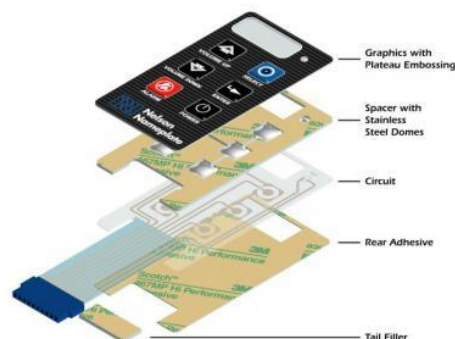
Construction

A membrane switch typically has 4 or more layers. The top layer of a membrane switch is the graphic interface between the user and the machine. The other critical layer is a printed circuit. This can also be a flex circuit made of copper and polyimide material. The layers are normally assembled using pressure sensitive adhesives although inexpensive designs can be held together through other mechanical means such as a keyboard housing. Contact between two traces can be made through a printed shorting pad or through a metal dome that stands on legs.



Backlight

Light Emitting Diodes(LEDs) is normally used as back light. However, LEDs create bright spots and are not suitable for overall back lighting of a panel, but rather as indicator lights. LEDs can either be surface-mounted to the circuit layer or be placed on a separate LED layer.



Please contact us for further information.