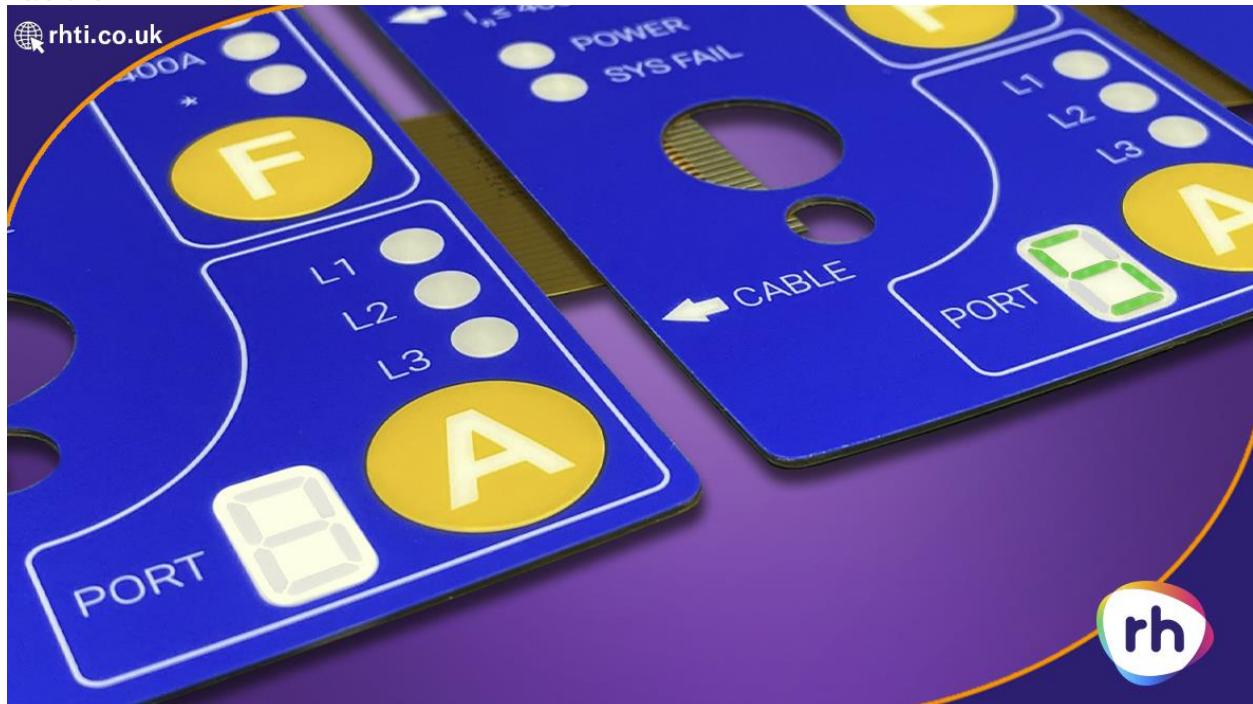


Improve your Membrane Switches with Integrated 7-Segment Displays

RH Technical Industries Ltd., a leading keypad manufacturer, introduces innovative membrane keypads featuring integrated 7-segment displays. These displays elevate user experience by providing clear, controlled readouts directly on the keypad, eliminating guesswork and simplifying user interaction with your device.

TECHNOLOGY

29/02/2024



Improve your Membrane Switches with Integrated 7-Segment Displays.

RH Technical Industries Ltd., a leading keypad manufacturer, can now offer membrane keypads with integrated 7-segment displays. These types of displays supply your end-users with a better operational experience by adding controlled readables. A 7-Segment display shows a numerical selection through the controlling interface that allows the user to select or view an exact number in a display, removing any possible guesswork.

7-Segmenet Displays are a very common, cost-effective solution to most people's needs. Standard preconstructed display components, traditionally mounted on the top surface of a PCB, offer clear visibility and illumination but

require careful depth evaluation. This is where RH can offer alternative manufacturing solutions to overcome many typical design issues.



RH offers two Integrated 7-Segment Displays solutions.

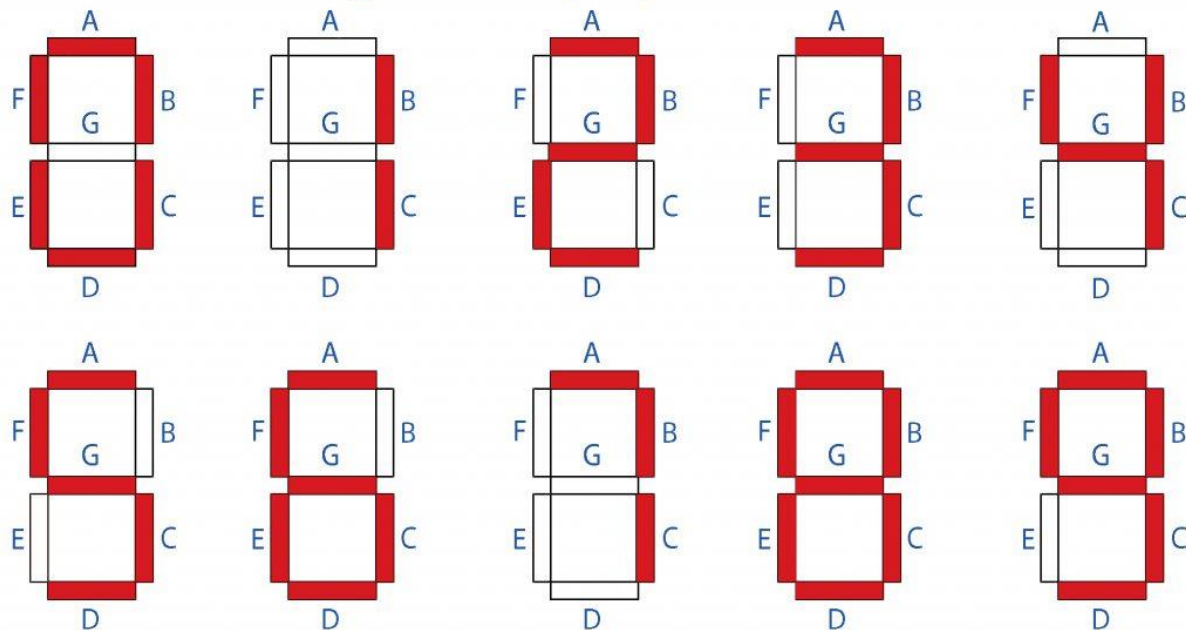
Every keypad is different, and what suits one customer may not suit another. Therefore, our engineers review each project separately and offer the most practical solution before manufacturing. The main challenge with 7-Segment Displays is the space available behind the switch and where the PCB is physically located. However, when you find mounting a display directly on the PCB causes design issues, RH has alternative solutions. Firstly, we can integrate a standard 7-Segment Display directly into the membrane keypad. Alternatively, where the depth of construction is a consideration, we can use micro LEDs to create the 7-Segment Display. This approach allows the keypad to be located away from the PCB and connected via the flexible copper tail. As a result, this opens up amazing design possibilities. The control panel can be as little as 1.5 mm in depth and able to fit into a standard enclosure recess.

RH Operations Manager – Tony Burd commented: “Integrated 7-Segment Displays are an ideal solution for customers that require a numerical value either entered or displayed on the surface of their switch. In contrast, using the micro-LED gives a slimline solution where space is limited in the design...”

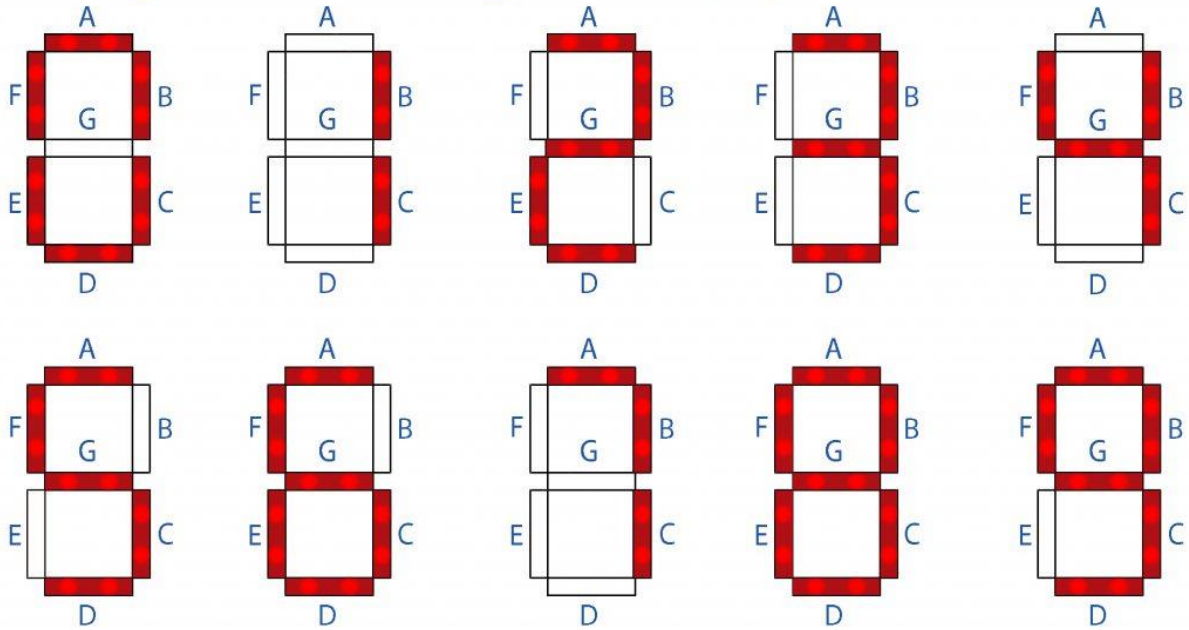
Design factors relating to integrated 7-Segment Displays:

- They can only be fitted to membrane keypads constructed with Flexi or Rigid PCBs; they cannot be fitted to silver circuits.
- An integrated display eliminates the need for a separate display module.
- An integrated display construction can vary between approximately 1.5-6mm in depth. (Dependent on display type choice)
- A keypad, customised with different colours and graphics, makes it a stylish and modern addition to any front panel.
 - Filter-coloured windows.
 - Add different coloured LEDs.

Standard 7-Segment Display



Intergrated LED 7-Segment Display



RH can streamline your projects.

Suppose you are looking for a keypad that offers a numerical display with clear visibility to reduce user error and enhance functionality. In this case, a keypad with the integral 7-Segment Display is a good option to consider. However, if your product construction is more complex, RH has the experience to offer the right solution to any bespoke project needs quickly and effectively! Our strength lies in making your project pain-free.

Should you currently be working on a new project design and want to discuss these types of display solutions further, Contact RH or call (01264-721450) today and ask to talk with our engineering department.