



## **Interface and Graphic Solutions:**

- ◆ Membrane Keypads ◆ Graphic Overlays
- ◆ Capacitive Switches ◆ Custom Labels
- ◆ Rubber Keypads ◆ LED Backlighting



### Your Partner for Interface and Graphic Solutions:

In today's competitive market, it's crucial to make a lasting impression on your customers. RH Technical Industries Ltd. can help you achieve that by providing high-quality interface and graphic solutions from concept design through into production.

### We are a leading UK manufacturer of:

- Membrane Keypads ~ (HMIs)
- Graphic Overlays
- Custom Labels
- Rubber Keypads
- Capacitive Switching

### Why Choose RH Technical Industries Ltd.?

We are committed to providing our customers with the best possible service. We will work closely with you to understand your needs and develop solutions that meet your project needs.

### Contacts:

RH Technical Industries Ltd.  
1-3 Wilson House, Magellan Close  
Andover, Hampshire SP10 5NT

0800 970 2345  
sales@rhti.co.uk



### Membrane Keypads

RH can help with your membrane keypad projects in a number of ways, including:

#### Design and Engineering Support:

RH's team of experienced engineers will review your concept design and environmental specification and then suggest practical solutions. They can also provide guidance on materials, manufacturing processes and offer practical advice regarding any testing the product may undergo.

#### Prototyping:

During the prototyping stage you can evaluate the design and functionality. This can help identify and resolve any potential issues early on in the process, prior to production.

#### Production:

RH has invested in a modern manufacturing facility here in the UK, and we also work with partners in the Far East. We produce high-quality membrane keypads, all of which must pass a strict quality control here in the UK before despatch.



### Testimonial

"RH has been supporting us for almost 10 years now across our projects. The team at RH have always given great service from prototyping through to production. They have supported us in identifying the right solutions, ensuring they meet both the regulatory and clinical needs of an active medical device."

Justin Buch - Chief Operations Officer





## Capacitive Switches

A capacitive switch is an electronic switch that utilises capacitance to detect and respond to touch. It works by measuring the change in capacitance caused by a nearby conductive object, such as a finger or stylus. Capacitive switches are commonly used in touchscreens, touchpads, and other touch-sensitive devices due to their smooth, precise operation and ability to register multiple touches. They are also employed in industrial applications as non-contact sensors for proximity detection, position sensing, and level measurement.



## Resin Doming

Selectively pouring polyurethane (urethane) onto a graphic overlay or keypad creates a durable and attractive label that is resistant to scratches, chemicals, and fading. RH offer a wide variety of resin domed labels to suit any need.

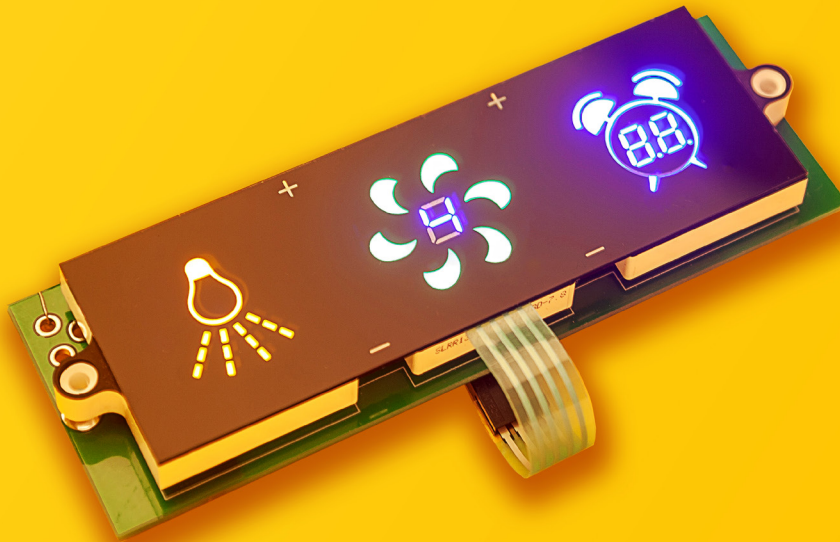


## LED Driven Backlighting

As well as using discreet SM LEDs in the construction of a membrane keypad, RH can now offer LED driven Light Guide Film to illuminate your keypad or control panel. A typical construction is only 1 millimetre thick in a typical keypad design and can be used to illuminate individual keys or act as a warning status indicator. By using multiple side firing LEDs individual keys or status indicators can be made to change colour on operation.

### Design Ideas:

- Add rear illumination with LGF backlighting.
- Touch sensitivity through robust substrates.
- Top layer custom graphics and finish.
- Secret til-lit indication.



## Anti-Microbial Protection

If your HMI is operating in a sterile location such as a laboratory or medical environment where cleanliness is essential, membrane keypads and graphic overlays can be manufactured using anti-microbial polyester.

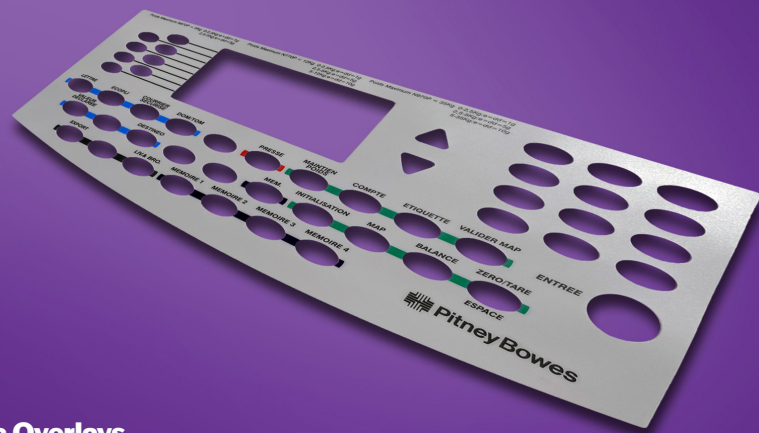
Microban® antimicrobial protection is the first material of its type to inhibit the growth of potentially harmful bacteria, including E. Coli, mould and mildew.



## 7 Segment Display

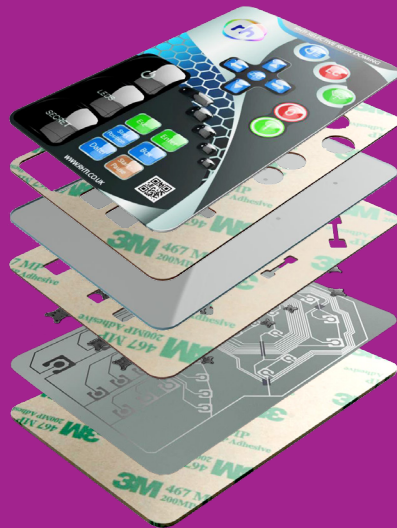
Integral 7-Segment Displays are now available in the construction of a membrane keypad, where space behind the keypad is at a premium. The technology uses micro-LEDs and the construction is only 1.5mm thick.





### Graphic Overlays

Graphic Overlays are suitable for a wide range of applications. As well as forming the top layer of a membrane keypad, they have many other applications including acting as an HMI over mechanical keys, as a keyframe label over silicone rubber keypads, as a surround to a touchscreen, or simply as a stand alone indicator panel. RH offer a wide range of materials and finishes suitable for most projects.



A Graphic Overlay with resin doming in position over a membrane Switch

### Screen and Digital Custom Printed Labels

RH manufactures custom plastic label solutions for a wide range of demanding markets including, Medical, Military, Aerospace and Industrial. With a combination of undersurface screen and digital printing on robust substrates such as polyester, polycarbonate and PVC, RH supplies the highest quality in graphic solutions.

Finish Considerations:

- Resin doming
- Metallic, pearlescent, mirror inks
- Conductive silver inks
- Embossed and tool cut edges
- Filter colours
- Matt, gloss and UV coatings
- Surface textures



### Product Identification:

Clearly identify your products with custom labels that include product QR, serial codes, barcodes, and other essential details.

### Safety and Warning Labels:

Adhere to safety regulations by informing your customers of hazards with clear, durable labels.

### Asset Tracking Labels:

Track inventory, equipment, and other valuable assets with durable, tamper-evident plastic labels.

### RH Labels

- Medical labels
- Industrial labels
- Plastic labels
- Instruction labels
- Metallic labels
- Kiss-Cut label sets
- QR code labels
- Barcode labels
- Serial numbered labels
- Rugged labels
- POS labels
- Plastic decals
- Window stickers
- Waterproof labels
- Warning labels
- Resin-domes badges
- Tamper evident labels
- Security labels
- Gaskets, spacers and shims

**We are here to support your needs!**

### Silicone Rubber Keypads

Rubber keypads can provide a reliable performance in rugged working conditions, where devices may encounter water, chemicals, solvents, dust, extreme temperatures or vandalism. The main reasons to choose silicone rubber keypads are durability, tactile feedback and versatility. Beyond the protective qualities you can add all the features from your membrane keypads designs, and light backlighting.





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