

Providing a timely and practical membrane keyboard solution!

RH prides itself on offering cost-effective, practical solutions to product interfacing challenges, be it [membrane keypads](#), silicone rubber keypads, capacitive switching and custom touchscreens. When a Lab Equipment manufacturer approached us to help develop a custom membrane keyboard following issues with an existing supplier, RH quickly set up a design review and engineered a practical membrane keyboard solution to meet the customer's needs.

The review's main focus was how we could manufacture such a large keyboard with a bespoke shape, this being something other companies approached were simply unable to do. At RH, we have extensive process capability using a range of machines and presses. This large keyboard proved to not be an issue for our processes. Offering a selection of custom print ideas, rugged materials, and special tooling, we quickly created a prototype of the membrane keyboard that the customer approved before moving into production.



Membrane Keyboard Construction

The standard process for a project like this is to apply the ink to the underside of the substrate. This application helps protect it from daily wear and tear. This substrate made up of a rugged single piece of polyester helps to prevent any liquid ingress into the keyboard. A feature which is critical in a laboratory setting. The final keyboard specification included a lightly textured polyester graphic overlay with embossed metal dome tactile switches over a printed silver circuit with EMC Shielding. The product also had a unique metallic ink colour that matched the blue background. All RH keypads are 100% electrically tested before despatch. In this case, we sent the keyboards to Shanghai, China, for regional assembly. Our customer was delighted with the

solution and our speed of operation that kept their production on track.

We are proud of the results we can achieve on a very tight time scale. However, having more time on a job is always nice to iron out every customer's product needs. This flexibility and customer support are what make RH unique. This customer-centric approach to every job makes RH stand out from the crowd for all your interface and industrial print needs. Contact us today for more information, whether you have time or are under time constraints!