

# FAQs CTRL UL101 Solid Probe Questions

## **1. What are the benefits of the solid probes?**

The UL101's solid probes enable a user to perform testing in contact mode on components such as bearings and gears. The solid probes provide heightened sensitivity, a finer clarity, increased reduction of competing noise, and are part of a "Full-Family" approach. Different lengths allow access to difficult-to-reach locations. By using the solid probes, you listen to only the vibration of metal in and around the component under test. You will be ignoring any airborne ultrasound - which can produce ultrasound a hundred times more intense in the air than a bearing or gearbox, so the solid probes provide a great benefit.

## **2. In what situations would the solid probes show improved performance?**

The solid probes improve the performance of the UL101 in any gearbox, valve, bearing, valve seat or injector. They also provide you with a way of listening to components internally such as internal hydraulics or fuel injectors inside an engine block.

## **3. What kind of tests would not show improved results with the new solid probes?**

Any external leak, specifically air leaks, vacuum leaks, high corona discharge, or electrical arcing cannot be heard with the solid probes. In these circumstances, CTRL recommends the use of a concentrator or acoustic probe attachment.

## **4. What is so important about a "Full-Family" of solid probes?**

Unlike the existing hollow probes, which screwed into each other to extend to different lengths, the solid probes are engineered to maintain the highest level of signal strength and to have the highest level of durability.

## **5. Why are there different lengths of solid probes?**

The solid probes' lengths are approximately 3-inches, 5-inches, 8-inches, 13-inches, and 23-inches. Each length is designed for reach in different situations while maintaining performance. It is best to use the shortest probe possible because of the nature of ultrasound to attenuate quickly.

## **6. What if I need a length longer than 23 inches?**

If a longer probe is required, CTRL Systems can custom-build you a length that provides you the extension you want while maintaining performance.

## **7. Are the solid probes compatible with all current version of the UL101?**

Any CTRL UL101 with serial number "RA" is compatible. Generally speaking, these models were shipped beginning in June 1999.

## **8. What about compatibility with older versions of the UL101?**

The solid probes will attach to all UL101's, but because of certain design features, CTRL Systems cannot guarantee performance.