

Sealing Solutions

APPLICATIONS IN INDUSTRY

PROBLEM: **Weatherproof** **outdoor keypads** **for audio system**

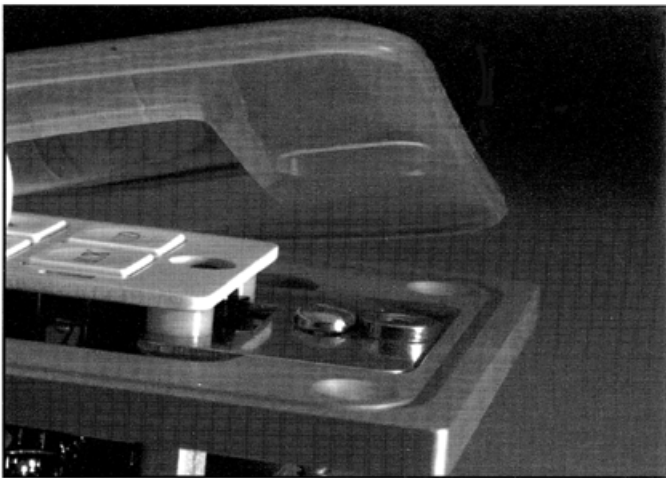


Figure 2

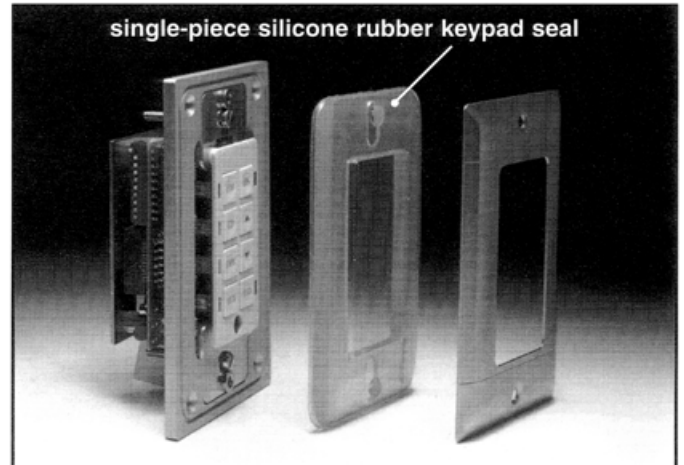


Figure 1

Subject: Custom seal for keypad controller

Situation: AUDIOACCESS, a division of Madrigal Audio Labs of Middletown, Connecticut, wanted to extend the capability of their popular multi-room audio system to allow keypad control from an outdoor location (e.g. patio). The keypad contains sophisticated circuitry and eight pushbuttons to select and control audio sources (e.g. tuner, CD, tape), volume control and on/off. In addition, each keypad contains status LEDs and an infrared receiver to control the system from a handheld remote. To make the keypad weatherproof, Audioaccess needed a transparent seal that would permit reading the legends on the buttons, facilitate through-seal operation, be easily integrated into their keypad design and be mounted to a standard outdoor electrical box.

Solution: APM designed a single-piece, crystal-clear, precision-molded silicone rubber seal that nests neatly into a perimeter groove of the keypad's front plate assembly (Figure 1). This pliable, UV-tolerant seal permits easy viewing of the keypad legends, operation of each button through the seal, tolerance to weather/dust, and molded-in recesses for the mounting screws (Figure 2).

To obtain further information on this subject, ask for our Custom Capabilities brochure.

APM HEXSEAL® Sealing Specialists

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