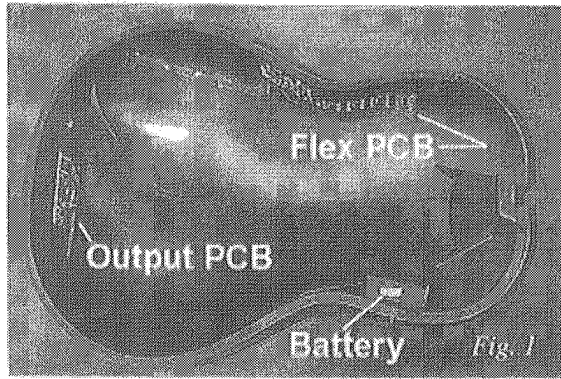


About this Manual...

This guide is intended to assist qualified service technicians in the troubleshooting and repair of Ovation's TS® preamp. While replacement of this preamp may be performed by Ovation field service centers, those not comfortable with the procedures

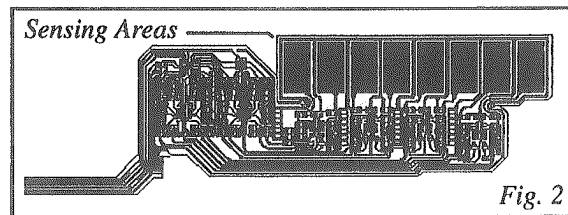


described herein may request factory service. In this event, contact the Ovation Service Department for information and a return authorization.

Overview

The TS preamp system has three discrete electronics assemblies: the Flex PCB, the Audio Output PCB, and the battery holder.

See figure 1. All circuit boards use SMT (surface mount technology) and as such, are difficult to repair on a component level. Therefore, any failures of PCB components should be repaired with a complete replacement of the PCB in question.

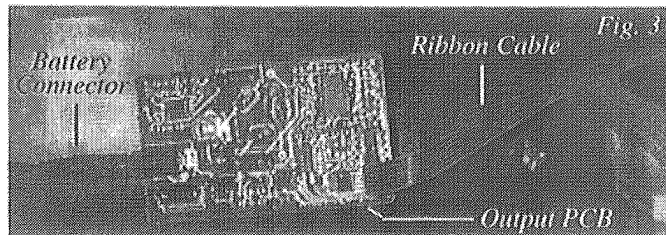


Flex PCB (Ovation Part 707010-A)

The flex PCB contains the circuitry which senses when the user's finger is near one of eight discrete sensing areas (see fig. 2). Once proximity is sensed, an encoding circuit creates a specific digital word to describe which pad is in use and transmits this word through the connecting ribbon cable to the output PCB. The flex PCB is attached to the bowl with a robust pressure sensitive adhesive.

Output PCB (Ovation Part 707020-A)

The output PCB is a conventional, double-sided glass design which contains the circuitry that



provides power and the audio signal path for the system. See fig. 3.

The circuit first decodes the digital word generated on the flex PCB which determines the attenuation level

required for the touch pad selected. It then connects the appropriate voltage divider circuit to the audio output reducing or increasing the signal level as required.