

Universal Power Amplifier Switchover Unit for Vibration Shakers

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Universal Power Amplifier Switchover Unit for Vibration Shakers facilitating facilitates driving any one of the TWO shakers from a single power amplifier system along with safety interlocks by flipping a single switch.

Major Specifications and Salient features

- ✦ One power amplifier switched between two shakers at the flip of a selection switch.
- ✦ Can be used for any make and model of the power amplifier and shakers.
- ✦ Universal interlocks of type NO, NC, TTL from outputs of temperature, pressure and RTD sensors can be connected to this unit.
- ✦ Controls the power supply for auxiliary units like Field Power Supply and Cooling unit of shakers.
- ✦ High Voltage and High Current relays are used to handle the armature current to drive the shaker. Each of the two relays has the capability of handling drive output of 500A RMS current at 100V RMS.
- ✦ In case shaker selection switch position is changed during the test accidentally, power amplifier will be forced to shut down immediately.
- ✦ Generally amplifier costs about 40% of the total shaker system. With this innovation, cost of one power amplifier is saved when two shaker systems are purchased.

Technology Transfer

URSC-ISRO offers Universal Power Amplifier Switchover Unit for Vibration Shakers developed by URSC to Automobile industries and R&D Institutes in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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🌐 <https://www.ursc.gov.in/industry/index.jsp>