

DEVELOPMENT OF A CALIBRATED SOUND LEVEL INDICATOR

by

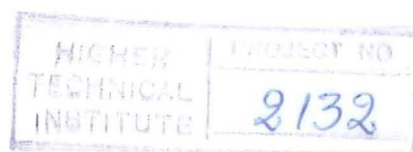
LYSSIOTIS PAUL

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PAUL LYSSOTIS

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Lyssiotis Paul

SUMMARY

The purpose of this project was to design, construct and test a circuit to indicate the various sound levels of an audio signal.

The objectives of this project were :

1. To investigate the properties of sound, microphones and relevant sound transducers.
2. To investigate pre-and calibrated main amplifier electronic circuit.
3. To investigate suitable displays.

The circuit operated in the following way :

The audio dependend signal was fed directly to the input terminals of the pre-amplifier and then it was amplified in an amplifying circuit. After a full wave rectification the direct-audio depended signal was fed into the non-inverting inputs of eight comparators comparing this voltage to fixed values. When a comparator was activated the transistor whose base was connected to the output of the op-amp was switched ON, thus an LED was ON indicating a sound level.

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