# VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELGAUM-590014 KARNATAKA



A Mini Project Report On:

### "CLAPPING SWITCH"

Submitted in partial fulfilment of the requirements for the award of degree of
BACHELOR OF ENGINEERING
IN
ELECTRICAL & ELECTRONICS ENGINEERING

Submitted By:

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

Sira Road ,Tumkur-572106 2021-2022

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# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

## CERTIFICATE

This is to certified that the mini project work (18EEMP68) entitled "Clapping Switch" has been successfully carried out by SHIVA KUMAR. Y (18V19EE016), YERRISWAMY, M (18V19EE020), SADDAM. K (18V20EE404), a bonafide of SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TUMKUR 57. In partial fulfillment for the award of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2021-22. It is certified that all corrections / suggestions indicated for internal assessment have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirements in respect of Clapping Switch mini project work prescribed for the said Bachelor of Engineering Degree.

B. H. Rowne

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Signature of the Principal

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128/12

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#### ABSTRACT

Clap switch is a switch which can switch on/off any electrical circuit by the sound of the clap. The basic idea of clap switch is that the electric microphone picks up the sound of your claps, coughs, and the sound of that book knocked off the table. It produces a small electrical signal which is amplified by the succeeding transistor stage. Two transistors cross connected as a bi-stable multi-vibrator change state at each signal. One of these transistors drives a heavier transistor which controls a lamp. This circuit is constructed using basic electronic components like resistors, transistors, relay, transformer, capacitors. This circuit turns 'ON' light for the first clap. The light turns ON till the next clap. For the next clap the light turns OFF. This circuit works with 12V voltage. Therefore, a step-down transformer 12V/300mA is employed. The primary application involves an elderly or mobility-impaired person. It is generally used for a light, television, radio, or similar electronic device that the person will want to turn on/off' from bed. The major disadvantage is that, it is generally cumbersome to have to clap one's hands to turn something ON or OFF and it's generally seen as simpler for most use cases to use a traditional light switch.

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