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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Remote controlled vehicle with limitless range"

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DEPARTMENT OF BASIC SCIENCES

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CERTIFICATE

This is to certify that the Micro-Project entitled **"Remote controlled vehicle with limitless range"** has been Successfully Completed by

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The bonafide students of **Department of Basic Sciences, Alva's Institute of Engineering and Technology,** affiliated to VISVESVARAYA **TECHNOLOGICAL UNIVERSITY, BELAGAVI,** during the academic year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Mr. Arjun S Rao
Mini Project Guide

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ABSTRACT

In this proposed project, one mobile phone which controls the robot will makes call to another mobile phone attached to the robot. If any button is pressed during call, at the other end of the call we can hear a tone corresponding to the button pressed. By using the phone connected in the robot, this robot will recognize the DTMF tone. By using DTMF decoder MT8870, the ATmega16 micro controller will process the received tone. The DTMF decoder MT8870 will decodes the DTMF tone into its equivalent binary digit and this binary digit is transferred to the micro controller. The mobile that makes a call to another mobile stacked in the robot is called as a remote. The construction of receiver and transmitter units is not required in this proposed robotic project. When we are transferring telephone signaling over the line in voice-frequency band to the call switching center, we used DTMF signaling. In real time, the signal generated by the DTMF encoder is the direct algebraic summation of the amplitude of two sine waves of different frequency, i.e., pressing '5' will send a tone made by adding 1336Hz and 770Hz to the other end of end of the line. In table I we had shown the tones and assignment in a DTMF system.