DC TO AC INVERTER VOLTAGE AS A TIMER FREQUENCY USING MICROCONTROLLER

Name of Student: Moh. Fasich
ID: 2207039004

Name of Student: Fajrin Yusuf Ersandhi
ID: 2207039009

Consultative Lecturer: Rachmad Setiawan, ST., MT.
ID: 19690529 199512 1 001

ABSTRACT

The development of increasingly advanced technology and advanced processing to continuously push the human mind to create something new for the advantages of his job. One example is to change the DC Voltage to AC Voltage Inverter or also known as DC to AC. Voltage Inverters DC to AC to work with does not depend on the source of AC electricity from the netting. Hopefully, these tools can become an alternative energy source provider of AC Voltage on an interim basis.

This Final Project design tool to an AC, DC Voltage Inverter using a Microcontroller for frequency control. These tools to work after the election frequency AC Voltage to be worked by four buttons that are controlled by the ATMEGA16 microcontroller. After that the generator frequency to work to change DC to AC Voltage with the output of the generator frequency Power Amplifier strengthened by the form of AC Voltage and the Voltage is increased to strengthen the results of using Step-Up Transformer.

Based on test results using 5 Watt until 40 Watt with a frequency of 40 Watt 56 Hz-3, 26 KHz, it can be concluded that with the higher frequency of the time it takes from the temperature reaches 30 °C to 35 °C temperature in faster average. And has been obtained by the average power efficiency of 25%.

Keywords: Inverters, Microcontroller.
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