**Modified sine wave inverter 12v to 220v**

Will be much better inverter circuit for appliances than the cheap Square wave inverter circuit that you usually find on the internet so let's take a look to components you need two pieces 33 kilo ohms resistors 2 pieces to 20 ohms resistors for 70 ohms resistor 1 kilo ohms resistor 1000 uf capacitor two pieces 100 NF capacitors three or five mm lad irf z44n or 3205 mosfets 5 Pin IC holder base 16 pin IC holder base 3 pin terminal connector two pin terminal connector triple five timer IC and the 4017ic proceed to checkout then I move to the cad to prepare circuit diagram here triple five IC is primarily used to produce the square wave and this 100 NF capacitor for the control voltage these two 33 kilo ohms resistors used for frequency control then Square wave goes to thus 4017 IC where it modified the square wave into the modified sine wave then through 220 ohms resistors it goes to mosfets and then to a Transformer here we need to input 12 volt battery and DC goes to the circuit. Now it is time to assemble the PCB so let's place all the components on the PCB according to the circuit diagram and after spending some time with the soldering process I clean the PCB with isopropyl alcohol and here our PCB is looking nice and clean now place the both ICS into the base connectors I simply used a piece of cardboard like this and fixed the PCB on it also place the socket for AC output I used 3 ampere 12012 Transformer you can also use Transformer maximum up to 5 amperes then I started to making some simple connections foreign circuit is ready to test I use this 12 volt battery to power up the circuit also I use my oscilloscope to show you the waveform the circuit produces here you can see the modified sine wave with 50 hertz frequency and 50 duty cycle in first test I used 33 watt volt mobile charger here you can see it worked perfectly now I will connect this blob holder for second test I used this 100 watt block for testing it is also working very perfectly now let's try this lad blob as you can see blub is blowing perfectly without any flickering issues the modified sign wave inverters is far more better for appliances than the square wave inverters if you enjoyed the video give a thumbs up for more useful .