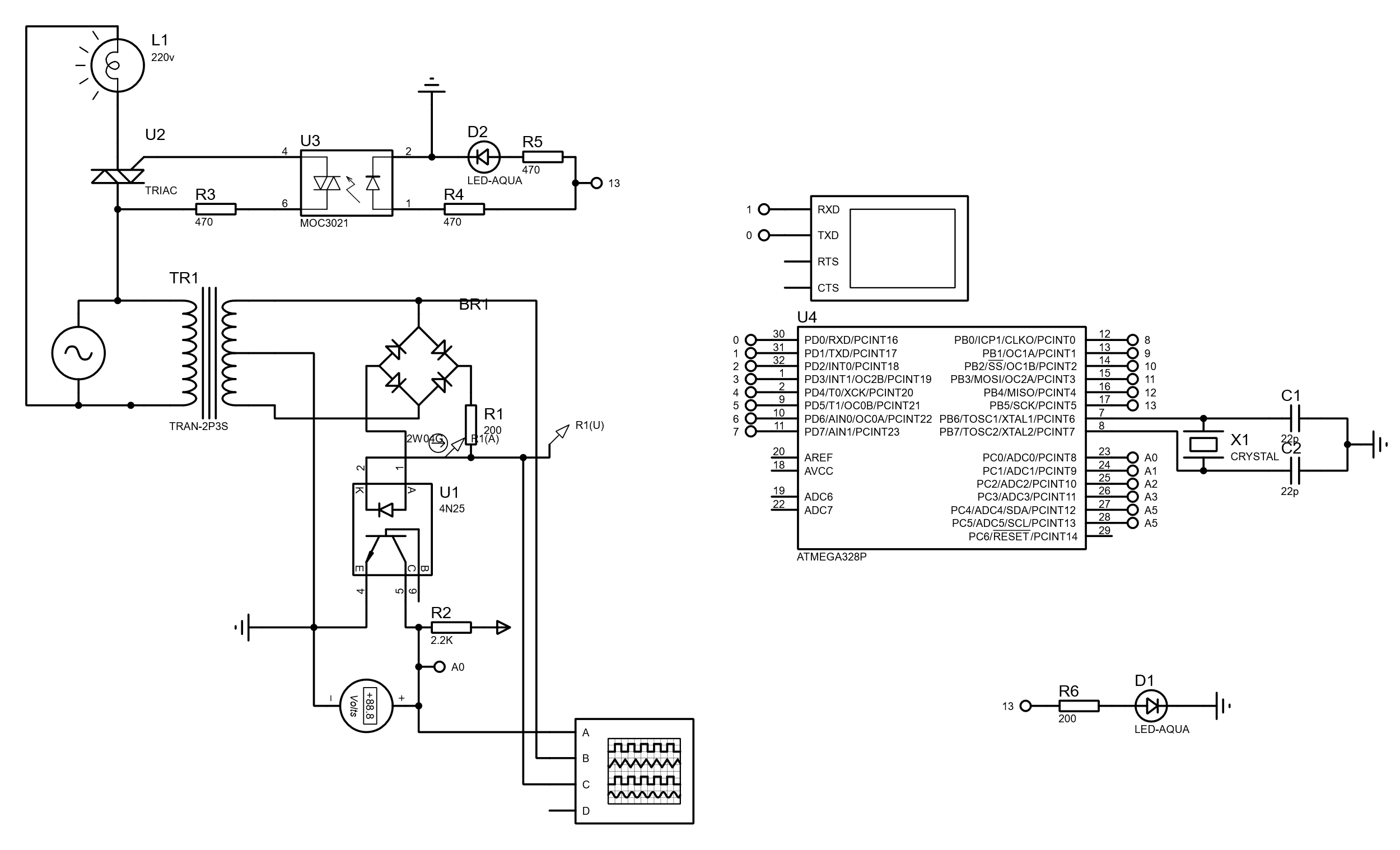
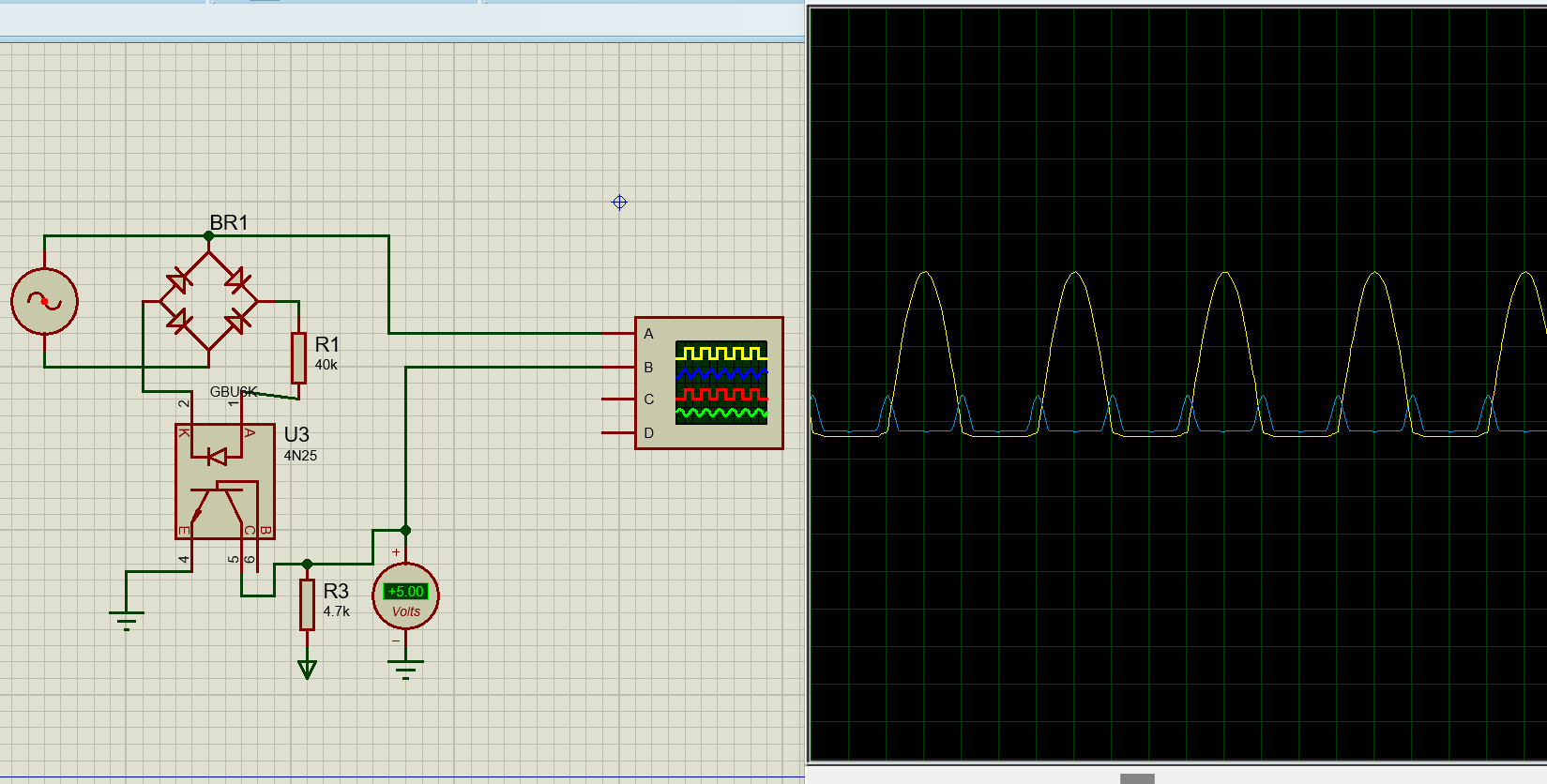
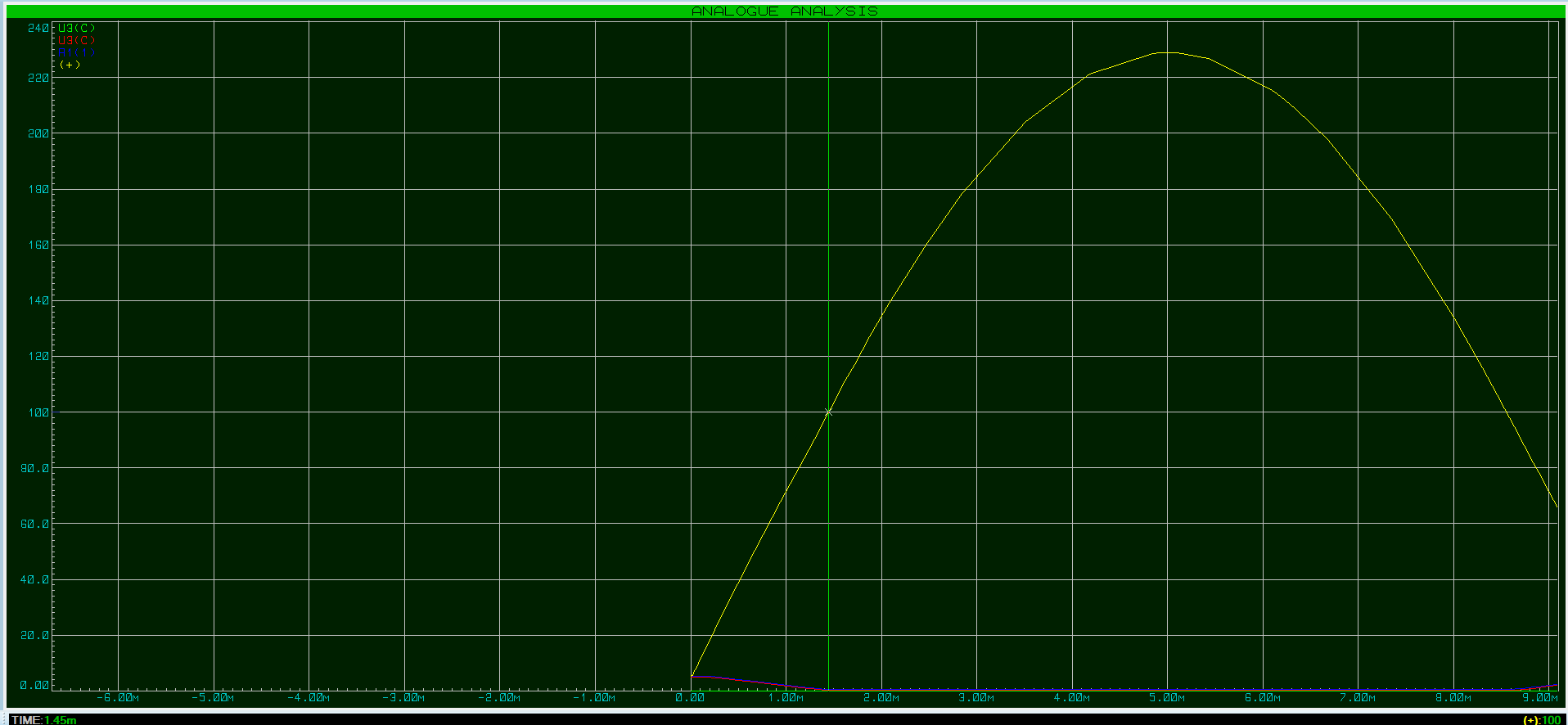
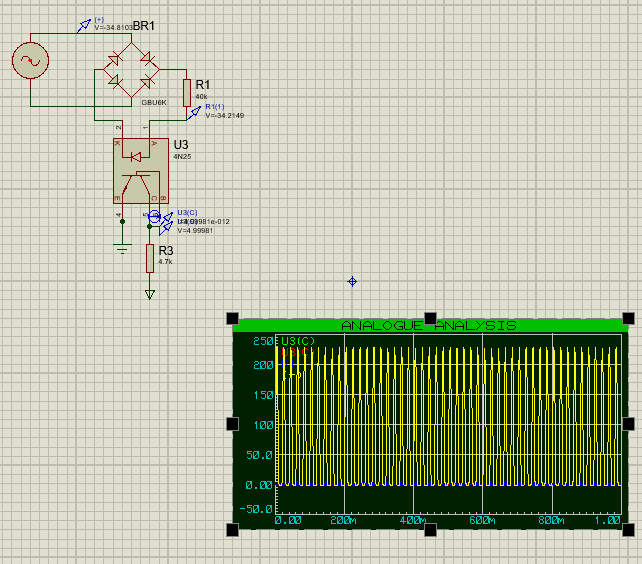
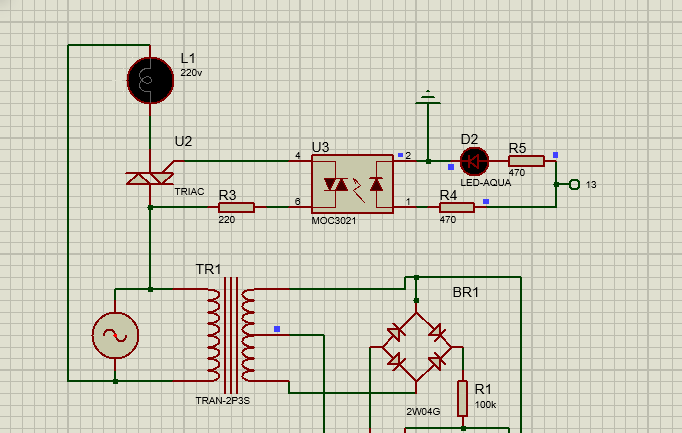
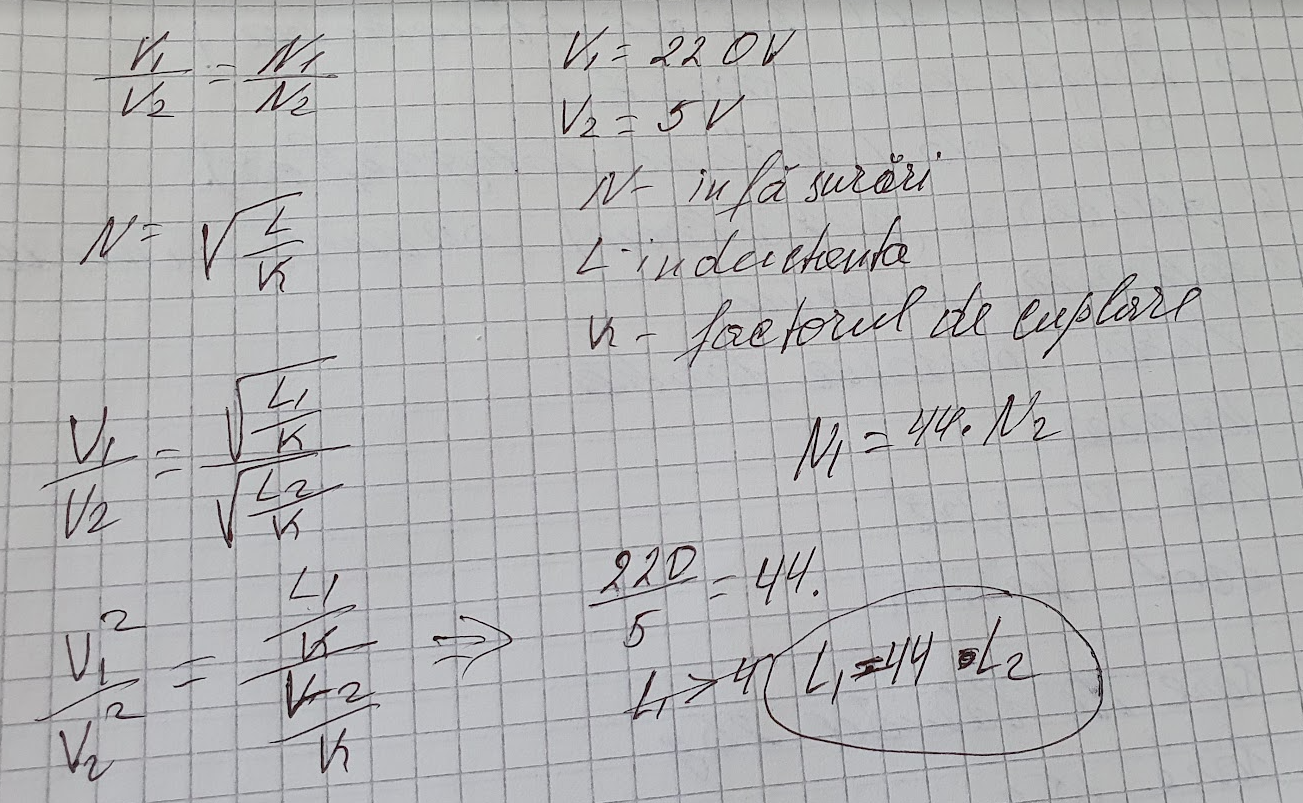
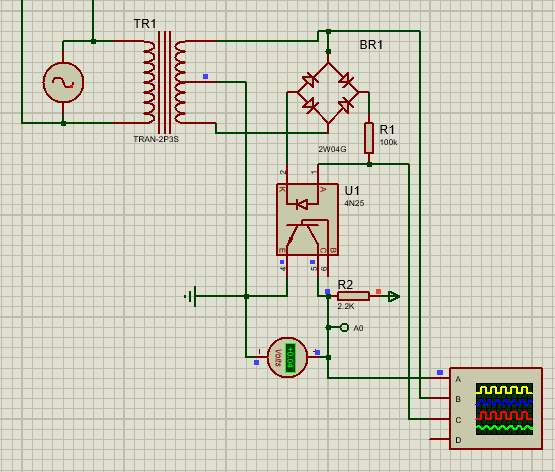
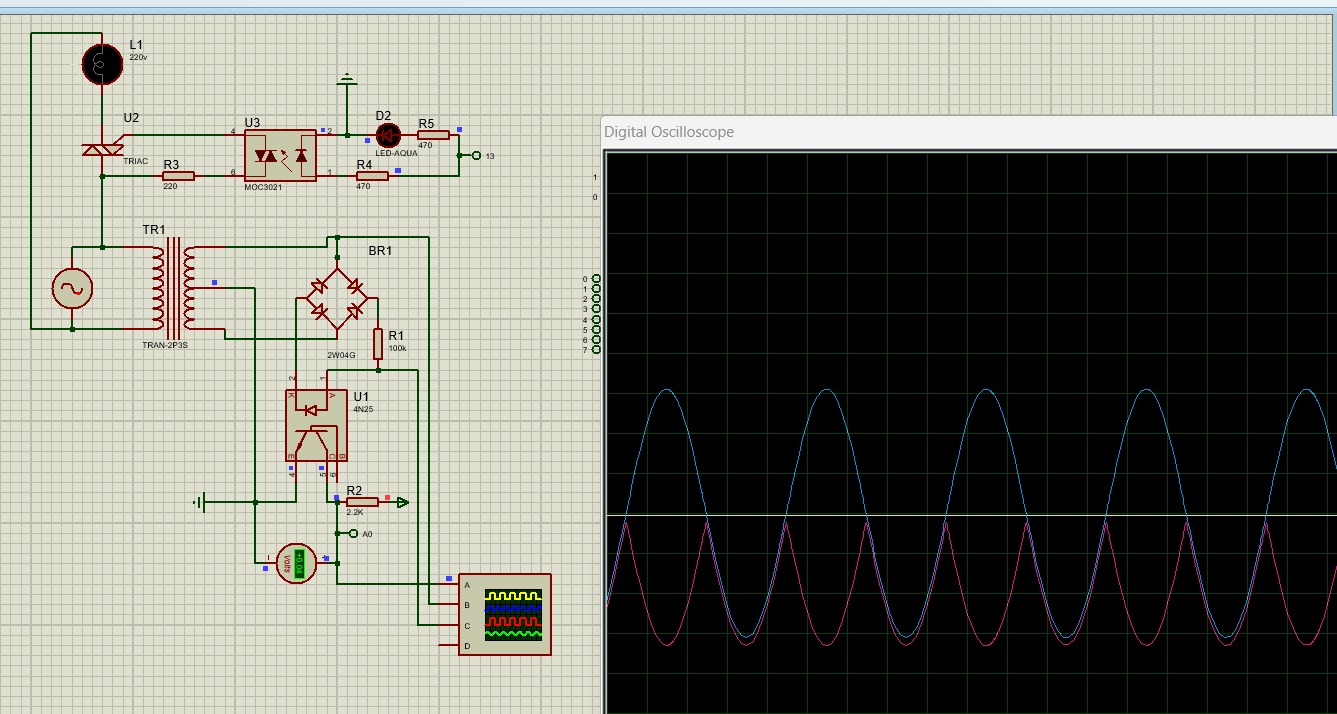
Zero Crossing detection

  
  
Without transformer  


Current and voltage in this simulation   
  
  
  


With transformer

|  |  |
| --- | --- |
| Neediest components | |
| Transformer | 220 to 24 and lower |
| Phototransistor | 4N25 |
| Diode bridge | 2W04G |

Other option

