

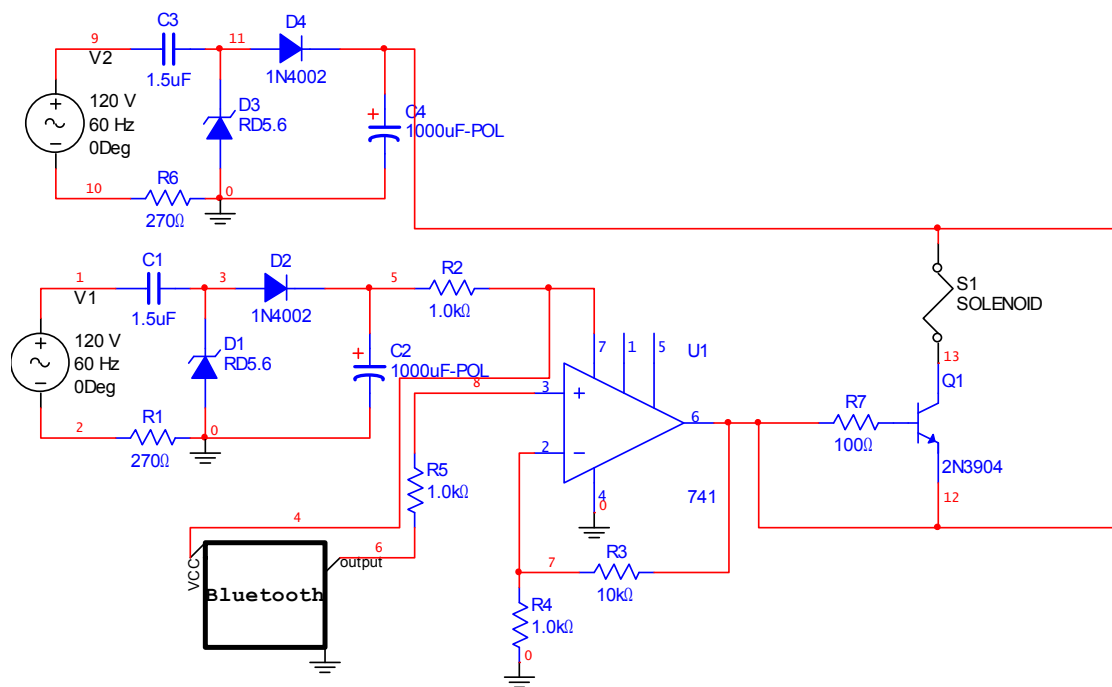
Pittsburg state University, Electrics Engineering Technology

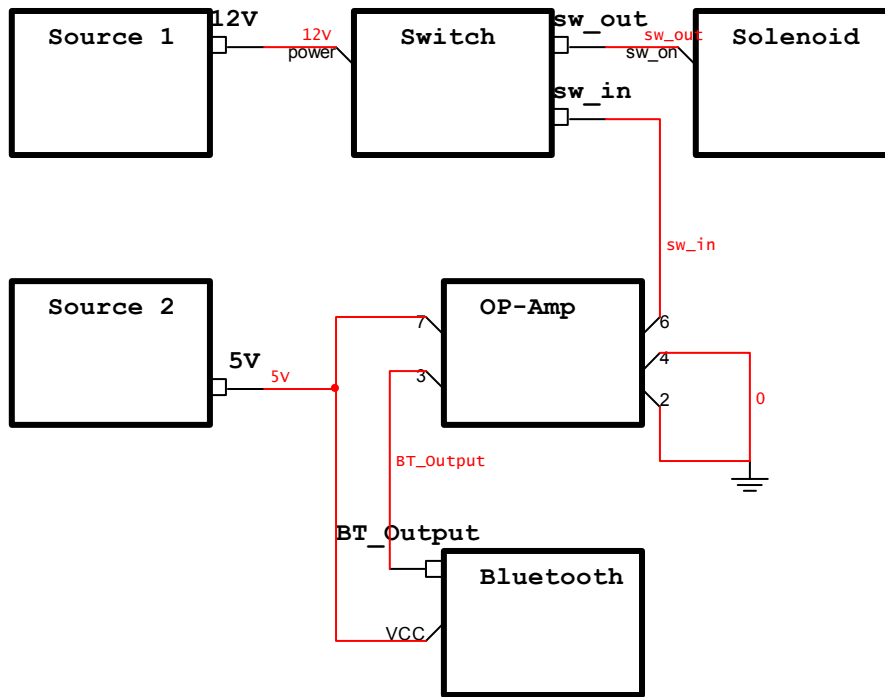
EET540 Electronic Design Proposal Spring 2007

The remote control home key

Cheng-Yu Hsieh

This thesis proposes a design of Bluetooth remote home key. Bluetooth is a recently developed wireless transmission technology. It attracts a great attention due to its low power and convenience. Along with the popularization of mobile device, mobile phone has become an important part in our daily lives. At present, in US, almost everyone has one mobile phone, even more than one. If remote control home key service can be added into present equipments, then it could promote the practicality of mobile phone and the importance of home security. Nowadays most of the door locks are lock/ unlock by regular keys, but it can only provide a low cost condition, and it is inconvenient to change or replace the locks. If mobile phones can be used to open or lock the doors, it would be increasing much security and reduce the larceny, thereby beneficial to both mobile phone manufactories and people.





I added another 12 volt (source 2) to the solenoid via the transistor switch, because the solenoid consumes power very fast and needs a lot of current. The source 1 provides 5 volt to both uA741 and Bluetooth receiver. When Bluetooth receiver searched a signal with correct password, it will output a DC 2 volt to the OP-Amp. Then the OP-Amp will give a signal to switch to activate the solenoid in order to open the door lock.