

**Title :**

Solar - Powered Bluetooth Sound System

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**Abstract :**

In modern electronic devices for both consumer and industrial, wireless technology is rapidly becoming a must have feature. Wireless Bluetooth technology is now standard in almost all mobile phones, laptops and other devices. There are a few similar projects on the market previously and totally rely on main supply which limits the usage strictly. This project of Cost Effective Real-Time Polling System is designed to create self-sufficient system than can send audio data from a phone or other device. It allows the Bluetooth technology to directly integrate into small scale project at a low cost, while remaining fully functional and extensible. By using loud amplifier with IC TDA7240A and 12V input voltage, the amplifier is operated and produced loud audio output for outdoor purpose. It produces a small battery powered speakers and solar panel that can produce enough power to charge the battery by using solar charge controller to control and protect the battery. The Bluetooth module 5V input voltage and the voltage regulator is used to step down the voltage from 12V to 5V. Furthermore, IC LM3914 is used in this project to indicate the battery level capacity. Result shows that by using IC TDA7240A, the output audio was very loud and clear when the volume increased to 80%.

**Remark**

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