

From the light of a lamp!

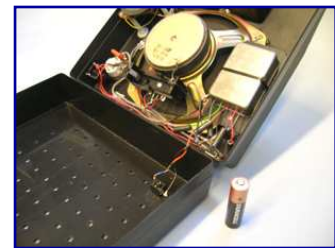
Demonstrating the versatility of their low-power radio technology and its application to alternatively powered radios, Invro Radio have produced a short video clip showing how the Invro FM Radio can be powered from the light of a hurricane lamp using a small solar cell.



The Invro FM Radio practically demonstrates how technology developed by Invro Ltd. greatly reduces the power consumption of a portable radio. Powered by a single 1.5V battery it operates for over 400 hours using an AA size battery and over 1000 hours using C size battery.

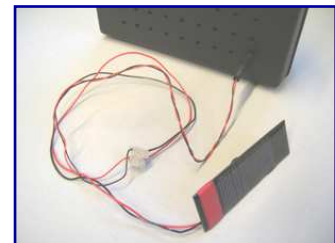
But reducing power consumption can also increase the potential of solar cells and wind-up generators to provide effective alternative power sources.

At the demonstration the battery was removed from the Invro FM Radio and a solar cell was plugged into the back of the radio. A hurricane lamp was lit which provided enough light to power the radio via the solar cell over a full range of volume and with no compromise to reception quality.



Speaking at the demonstration Dr Duncan Grant C.E.O. Invro Ltd. said;

"In the past the focus has been to develop alternative ways of powering a radio, with little attention paid to reducing power consumption. But low power consumption is advantageous whichever power source is used. Our approach not only dramatically reduces the running costs of a battery operated radio but also greatly increases the effectiveness of alternative sources and storage systems to meet the power demand."



One aspect of alternatively powered radios that is often overlooked is the storage system. Wind-up radios rely on a rechargeable battery to store the energy generated by winding. They are also used in solar power systems to provide power when there is insufficient light. However these batteries have a limited number of storage cycles and their storage capacity reduces over their lifetime.

Reducing the power demand increases the useful lifetime of these batteries. An alternative to rechargeable storage batteries are super-capacitors. These devices perform the same function but there is no limit to the number of times they can be charged and discharged. At present they are too expensive to be used in a radio, but since their price is strongly related to their capacity reducing power demand increases viability of this storage method.