

Transmitting Music through Electric Wires in Buildings

Trilokya Bora (23 years arts graduate) and his younger brother Champak Bora, (20 years, 1st year student of Diploma in Civil Engineering) belonging to a middle class family, thought about transferring audio signals and it struck them that they could use the existing electrical wiring system. After several attempts they succeeded in transferring audio signals from one room (with a tape recorder) to another (with a speaker) .With the assistance of GIAN-NE they could visit and discuss the innovation in IIT –Guwahati.

The electrical wiring system consists of an active, a neutral and an earth line. They made an adpoter through which the neutral line and earth line of a general electrical system are used to transmit audio signals within the house. Using this technique, audio output from a tape recorder or radio is connected to a plug adapter in which the live point is disconnected. Now the audio signals are available in the neutral and earth wires. The output of the audio signals is collected through the adapter and connected to the audio output device like speakers at any other location within the house i.e., the output of the music system is inputted in the earth and neutral sockets.

In whichever room one wants to hear the music, one can insert the two wires into the plug points and the speaker into the earth and neutral socket. Investment required for communication purposes will reduce drastically. The total cost for re-wiring of audio transmission is reduced and cost of the adapter is only Rs.15. This innovation has the potential to offer a new low cost solution to related issues in communication technology