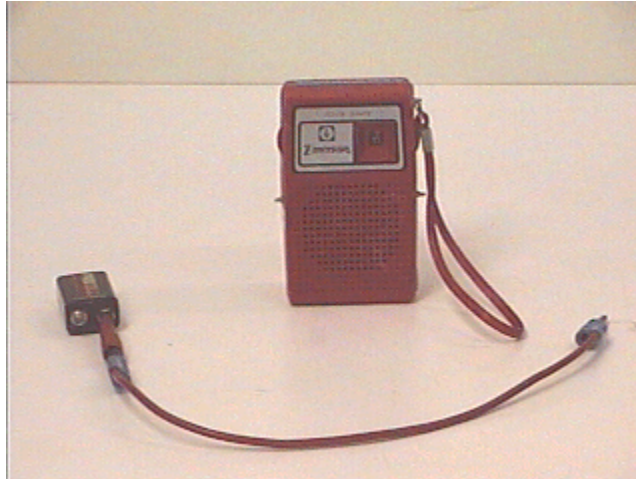


Answer #185

The answer is (e): you will hear a click when the battery is connected or disconnected, as heard in an mpeg video by clicking (har, har) your mouse on the photograph below.



When the battery is either connected or disconnected it sends out a changing electromagnetic field that is picked up by the radio. A rapid change in the electromagnetic field includes a wide region of frequencies, so almost anywhere you put the radio dial you will hear a sound - a loud click accompanying the very rapid electromagnetic field change over a very short period of time when the electric current is changing. During the time when the contact is made and the current in the wire is constant, no changing field is produced so nothing is picked up by the radio.

This is one of your simpler radio transmitters!

[Archive 10](#)

[Question of the Week](#)

[Outreach Index Page](#)

[Lecture-Demonstration Home Page](#)



For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).