

- 15** A point source of sound emits energy equally in all directions at a constant rate and a detector placed 2.0 m from the source measures an intensity of 3.0 W m^{-2} . The amplitude of the wave at the source is then doubled.

What intensity would the detector measure if it is now placed at a distance 4.0 m from the source?

A 3.0 W m^{-2}

B 1.5 W m^{-2}

C 0.75 W m^{-2}

D 0.38 W m^{-2}

