



[Portal](#) > [FAQs](#) > [All Other Radios](#) > [DAB Specific](#) > [Optimum aerial lengths for DAB & FM](#)

Optimum aerial lengths for DAB & FM

Pure Support - UK - 2020-11-29 - in DAB Specific

Optimum aerial lengths for DAB & FM

DAB and FM (Wavelength(Lambda) = Speed of Light(m/s) / Frequency(Hz))

DAB (170 - 240 MHz)

Bottom of Band 3:

1 Wavelength = $3 \times 10^8 / 175 \times 10^6 = 1.71$ meters. 1/4 wave = 43cm and 1/2 wave = 86cm

Top of Band 3:

1 Wavelength = $3 \times 10^8 / 240 \times 10^6 = 1.25$ meters. 1/4 wave = 31.3cm and 1/2 wave = 62.6cm

FM

Bottom of Band 2

1 Wavelength = $3 \times 10^8 / 87.5 \times 10^6 = 3.4$ meters So 1/4 wave = 86cm

Top of Band 2

1 Wavelength = $3 \times 10^8 / 108 \times 10^6 = 2.8$ meters So 1/4 wave = 69.4cm