



Theory of Operation Alpha Radar Detector

For FCC Part 15 Order FCC02-211 compliance.
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The Alpha line of radar detectors are two-stage superheterodyne receivers that detect the presence of speed measuring radar in the X, K and Ka bands. The local oscillator frequency in the first mixing stage is swept from 10.92 GHz to 11.39 GHz. In the second mixing stage there are three discrete frequencies used for the local oscillator. These are turned on in succession, one frequency per 1st local oscillator sweep period. The second local oscillator frequencies are 530MHz, 1550MHz and 2085MHz. An LED display shows band and signal level detection status.