

Applications on AM

SUPERHETERODYNE RECEIVER

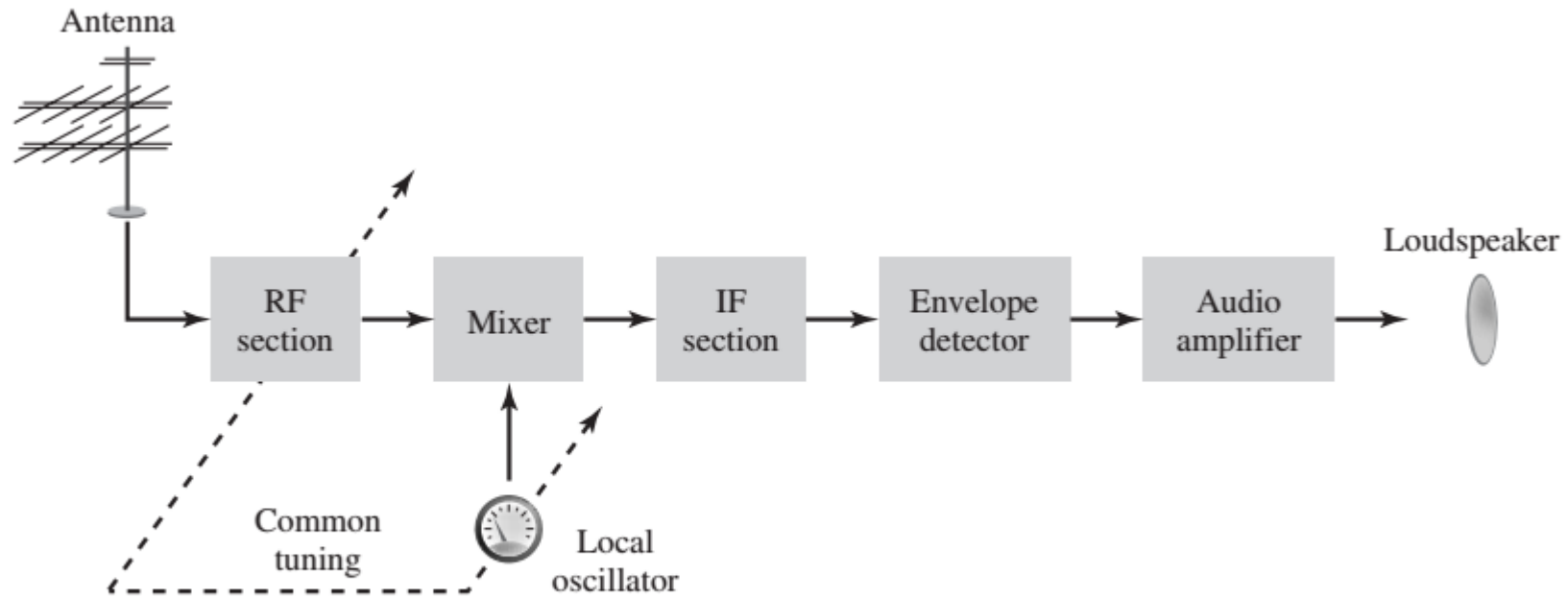
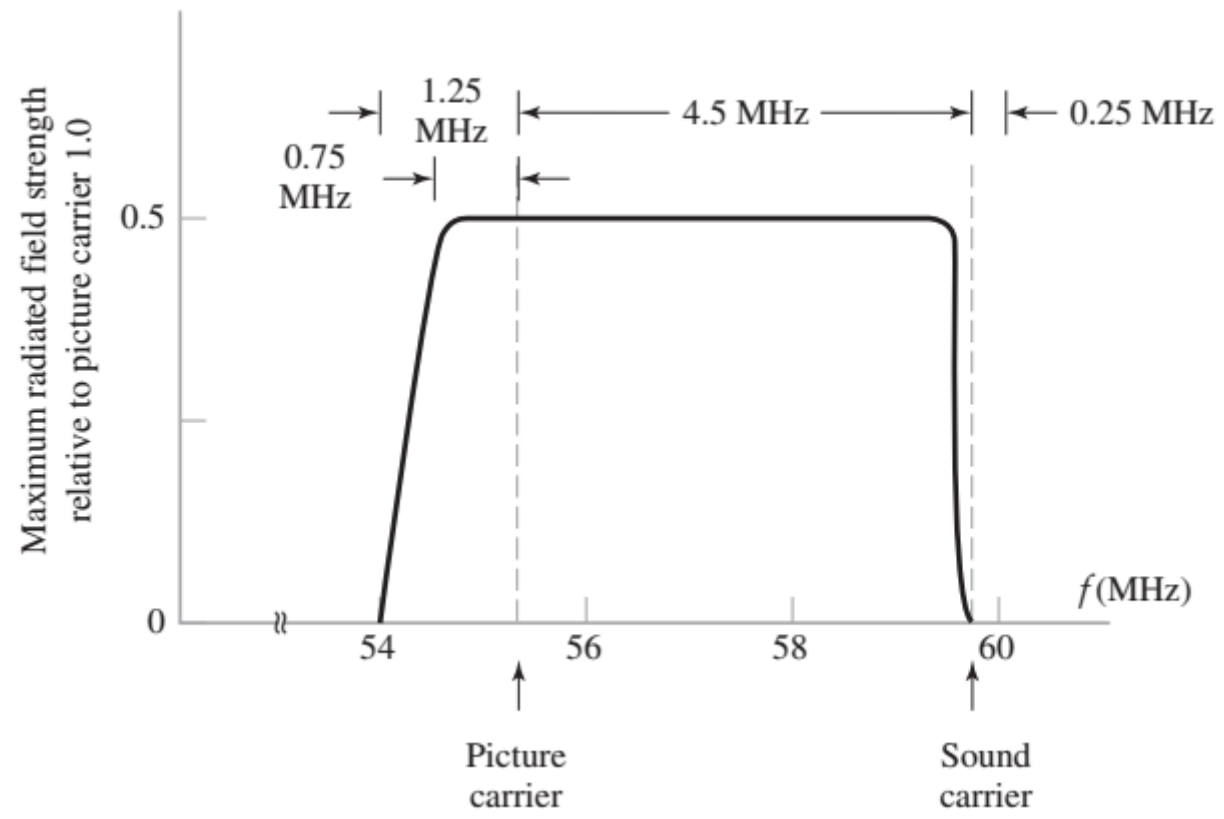


FIGURE 3.27 Basic elements of an AM radio receiver of the superheterodyne type.

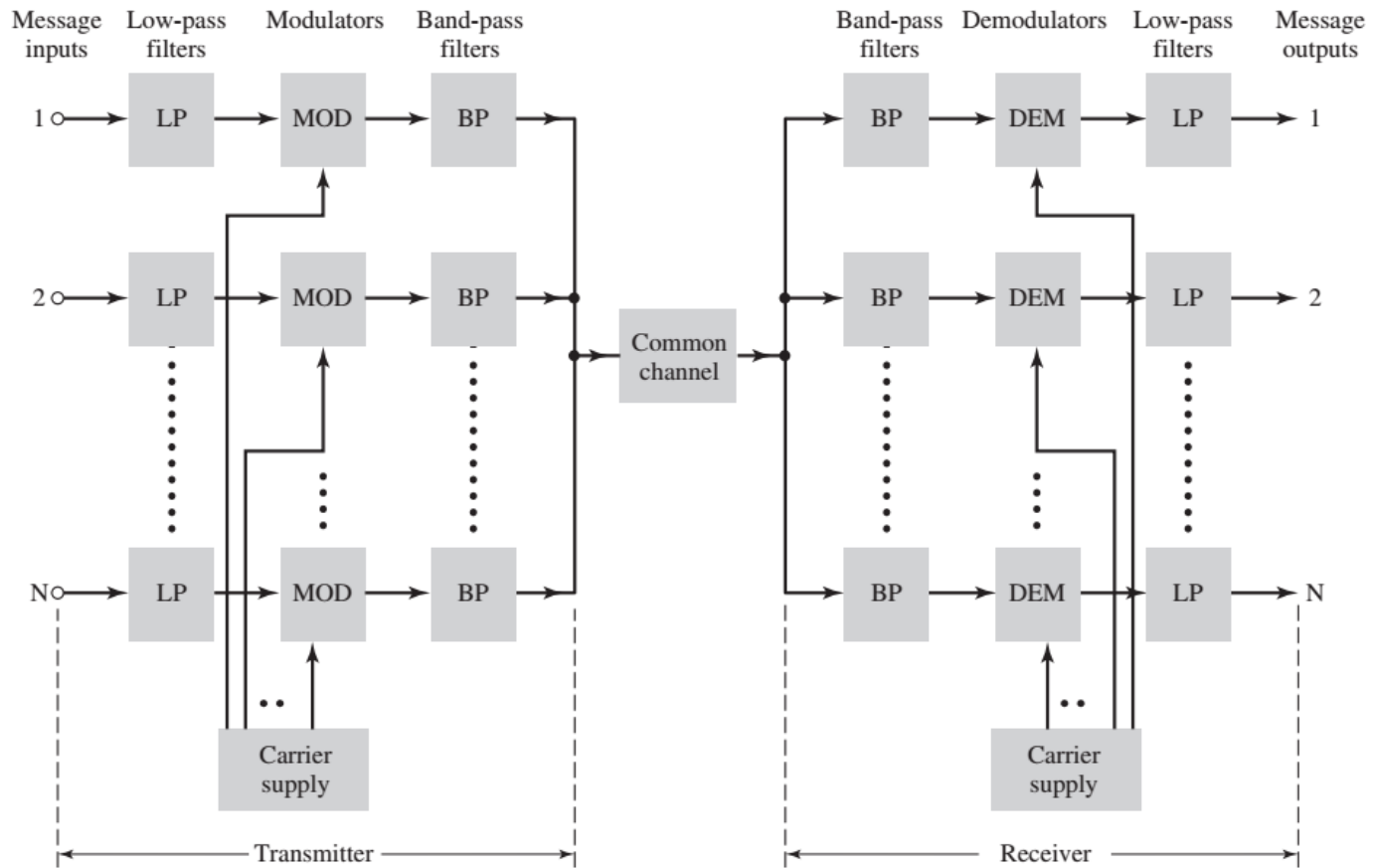
TABLE 3.2 *Typical Frequency Parameters of AM and FM Radio Receivers*

	<i>AM Radio</i>	<i>FM Radio</i>
RF carrier range	0.535–1.605 MHz	88–108 MHz
Mid-band frequency of IF section	0.455 MHz	10.7 MHz
IF bandwidth	10 kHz	200 kHz

$$f_{IF} = f_{RF} - f_{LO}$$



FREQUENCY-DIVISION MULTIPLEXING



EXAMPLE 3.6 Modulation steps in a 60-channel FDM system

The practical implementation of an FDM system usually involves many steps of modulation and demodulation, as illustrated in Fig. 3.30. The first multiplexing step combines 12 voice

