DX-351 (200-0215) Frequency Conversion Faxback Do

Faxback Doc. # 3567

Several different terms are commonly used when referring to tuning locations of a station -- the frequency in kilohertz (kHz) or megahertz (MHz), or the length of one wavelength at the tuned frequency, in meters. Amateur Radio operators generally group the frequencies they operate on using the frequency's wavelength.

The following information can help you convert between the different terms:

1 MHz (million) = 1,000 kHz (thousand)

To convert MHz to kHz, multiply by 1,000.

 $9.62 \text{ MHz} \times 1000 = 9620 \text{ kHz}$

To convert from kHz to MHz, divide by 1000.

2780 kHz

_____ = 2.780 MHz

To convert MHz to meters, divide 300 by the number of megahertz.

300 ----- = 42.25 meters

7.1 MHz

To convert meters to MHz, divide 300 by the number of meters.

BAND ALLOCATION

Certain portions of the radio frequency spectrum are set aside for specific purposes. Each range of frequencies is called a radio band.

NOTE: Bands are often referred to by wavelength. For example, the 19meter band refers to the range of frequencies whose wavelengths are about 19 meters long.

Amateur Radio Frequencies

Amateur radio operators often broadcast emergency information when other means of communication break down. Amateur radio operators use Morse code (called continuous wave) and single sideband voice. The following chart shows the continuous wave frequencies you can receive on the DX-351. The DX-351 cannot receive single sideband signals.

Continuous Wave

7,000 - 7,150 kHz 14,000 - 14,200 kHz 21,000 - 21,250 kHz 28,000 - 28,500 kHz

Time Frequencies

The National Institute of Standards and Technology operates station WWV in Fort Collins, Colorado on 2,500, 5,000, 10,000, 15,000 and 20,000 kHz. These stations operate exactly on frequency and also give the exact time of day at specified intervals.

You can tune to Canada's time station CHU on 7,335 kHz.

You can tune to Australia's time station VNG on 12,000 kHz.

International Radio Stations

International commercial broadcasts are found in the following bands. These programs (often in English) usually contain news, commentaries, music, and special features reflecting the culture of the broadcasting country. You might find it easiest to hear these broadcasts between 6:00 PM and midnight.

This list shows some of the most popular bands.

| Band (in meters) | Frequency Range (in MHz) | |
|------------------------|----------------------------------|-----|
| 49 meters | 5.800 - 6.200 | |
| 41 meters 31 meters | 7.100 - 7.500 9.500 - 9.900 | |
| 25 meters | 9.500 - 9.900 11.650 - 12.050 | |
| 19 meters | 15.100 - 15.600 | |
| 16 meters | 17.550 - 17.900 | kHz |
| 13 meters | 21,450 - 21,850 | |
| 11 meters | 25,600 - 26,100 | kHz |

NOTE: Ham operators and international stations share 7,100 kHz to 7,300 kHz. Interference is heavy in this range.

(ALL-12/12/94)