

TRIO™ XT Radio Frequency Definitions

Carrier Frequency:

A unique frequency used to "carry" data within its boundaries. It is measured in cycles per second, or Hz. Trio™ SkinTightener uses a low frequency of 5MHz

Modulated Frequency:

The easiest way to describe modulation is using the example of amplitude modulation (AM). Here, the audio signal will alter the amplitude of the carrier; when the amplitude of the audio signal goes up, the amplitude of the carrier goes up too by a proportional amount, when the signal goes down, the carrier frequency goes down, and so on. For frequency modulation (FM), the amplitude of the audio signal changes the frequency of the carrier so that when the amplitude of the audio signal goes up, the carrier frequency will be increased to a higher frequency and when it does down the carrier frequency will go down. Another type of modulation is phase modulation. Here the phase angle of the carrier is changed. This is more important for digital modulation and will be dealt with later.

Frequency modulation is the process of varying the frequency of a carrier wave in proportion to the instantaneous amplitude of the modulating signal without any variation in the amplitude of the carrier wave. Because the amplitude of the wave remains unchanged, the power associated with an FM wave is constant.

Sequence Modulation:

In spread-spectrum systems, modulation in which a sequence of binary pulses is used directly to modulate a carrier frequency. TRIO™ XT uses sequence modulation of 1Hz, 2Hz, 3Hz, 5Hz, & 10Hz.

