

MICROBAT :

OVERVIEW:

The Microbat is an ultrasonic bat detector that allows the user to detect the ultrasonic (sonar) cries of bats and converts these sounds to an audible signal the user can hear. The unit converts high frequency sounds that are beyond the range our ears can detect to lower frequency sounds that we can detect. Bats use sonar to both detect prey items (insects) and to navigate in the dark through the air and through the foliage of trees and shrubs. Most humans can hear sounds with frequencies ranging from 20 Hz (cycles/sec) to 20,000 Hz (20kHz). Sounds above 20kHz are considered ultrasonic frequencies. Bats produce cries that are emitted at frequencies that range from 9 kHz (audible to the human ear) to over 200kHz.

INSTRUMENTATION:

The Microbat bat detector possesses a microphone that can respond to high frequency sounds. The output of this microphone is fed to an electronic circuit that transforms the sound into a lower frequencies that is then fed out to a speaker.

The unit has 2 frequency ranges: High and Low. The High frequency range is centered at 46 kHz (green light) and the low frequency range is centered at 26 kHz (red light).

INSTRUCTIONS:



To use the Microbat:

1. Press the red ON/OFF button to turn the unit ON.
2. Press the F° button to select either the HIGH (green light) or LOW (red light) frequency range of the detector. Scan the sky with the top of the detector pointed upward. If you do not detect bat cries, switch to the alternate frequency range.
3. REMEMBER TO press the ON/OFF switch to turn the unit off after use.
4. ADDITIONAL INFORMATION ON BAT SONAR CAN BE FOUND IN YOUR NOTEBOOK