

Ultrasonic and Subsonic Devices for Pest Control

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Various ultrasound and subsonic pest control devices have recently been marketed as a safe, effective alternative to traps and poisons, ridding your house of infestations of pests such as rats and mice, snakes, and even fleas and roaches.

Ultrasonic Devices

Ultrasonic pest control units produce ultrahigh frequency sound, inaudible to the human ear. These devices have been available for many years, and are marketed under brand names such as “Sonitron,” “Pest Chaser,” and “Pestrepeller.” Manufacturers’ literature states that the ultrahigh pitch sound produced by the little black boxes can be heard only by the pests, and not by other animals or humans, and are so irritating to the pests that they either leave the house or die. They further stipulate that the devices will not harm household pets, such as gerbils, hamsters, cats, etc.

Subsonic Devices

Subsonic units produce an ultralow frequency sound or vibration (compared to the ultrahigh frequency sound of the ultrasonic devices). Vibrations are emitted directly from a speaker in a black box. As with the ultrasonic device, a red indicator light may be on to show you the device is working since the human ear will not detect these sounds. Subsonic pest control devices are said to be more effective than the ultrasonic ones. The subsonic box, plugged into a common outlet, supposedly sets up low frequency vibrations through the electrical wires that neither insects nor rodents, as well as various other pests, can

stand (Fig. 1). Humans and pets will not be harmed, and the electrical wiring in a house or structure forms a positive shield around the inhabitants.

Effectiveness

Scientific evidence shows that most insects, rodents and other animals hear or sense the same range of frequencies that humans do. If a sound or frequency doesn’t bother us, it is doubtful that it will bother pests. In many cases, even sounds that bother humans may not bother pests! Further, since gerbils, hamsters, mice and rats are all closely related, anything that irritates unwanted mice and rats will seriously affect pet rodents.

Testing has shown that sounds emitted by ultrasonic and subsonic devices do not carry far, with about one-half of the energy gone in 15 feet and none remaining at 30 feet. Objects in the path of the sound block the signal (Fig. 2) creating “shadows.” Since insects and mice hide behind couches, chairs, refrigerators, etc., these shadows would render the device useless.

Recommendations

Scientists have recently concluded that these ultrasound units do not offer effective or proven rodent or insect pest control. For best results use proven, effective management practices and devices (fly swatters, mouse traps, sanitation, fixing leaky faucets, etc.) If the pest situation is unbearable, seek help from a certified, professional pest control company.



For further information concerning effective pest control in the home, see the following Rutgers University Fact Sheets:

About Millipedes	FS005
The Black Carpenter Ant and Its Control	FS006
Control of Cat and Dog Fleas	FS090
House Ants and Their Control	FS137
Carpet Beetles	FS175

Information within this Fact Sheet supplied by Dr. L. R. Askham, Washington State University.

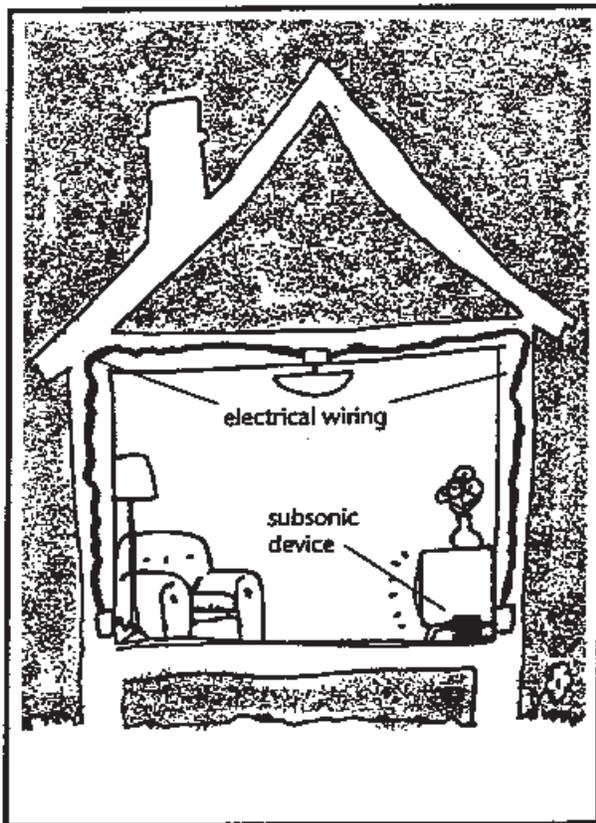


Figure 1.

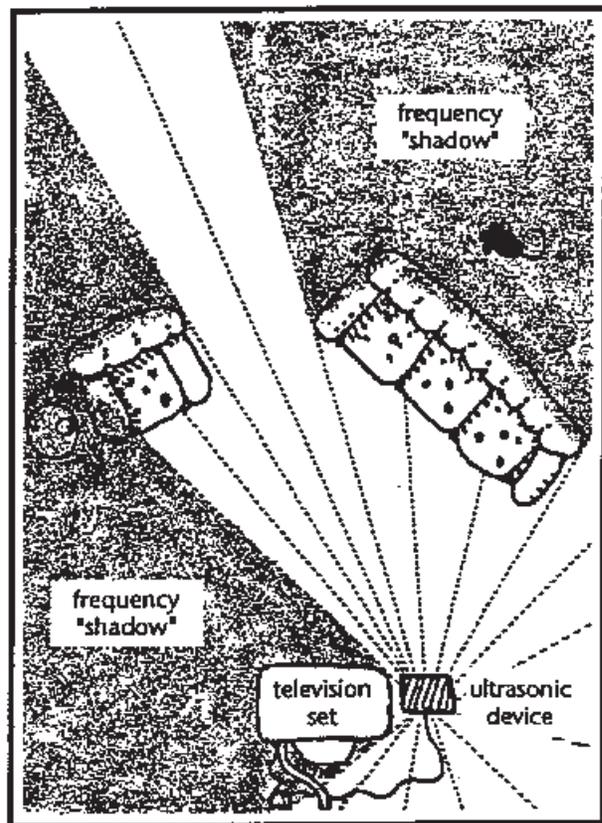


Figure 2.

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