The instrument you purchased is a multifunctional protective device producing directional piercing and high levels of longitudinal compressional sonic waves at SPL of >130 db measured at 1m- Observe label. These conditioned sonic waves produce painful, nauseating, disorientating, paranoia, and other deleterious effects. The device can help avoid unwanted confrontations and home intrusions yet is not life threatening. It can be used for keeping most unwanted four-legged creatures from ravaging gardens, ornamentals etc.

Basically, the unit produces a wide band of frequencies ranging into the high audible to the ultrasonic. Most people will hear or feel or become nauseous, lightheaded, dizzy or just plain uncomfortable and find the output intolerable to be around. Not all people or animals are alike and you will find some will be affected far more than others.

Successful performance of this instrument will require you to learn the functions of the controls their limitations and their effects and settings for producing optimum effects on selected targets. Range can be 25 feet out to 200 feet depending on target sensitivity. NOTE: Unfortunately, the sensitivity curve shows younger women are the most effected while old men the least!

The unit has settings that range from 5 kHz to 22 kHz. These settings are stable and will perform different functions on different targets. Most humans will not hear above 18 kHz, but will feel the effect over a period. As you decrease the frequency people will start to hear it, as well as feel it's and it is the discretion of the user along with the effect on his target where he adjust his settings.

The unit also has a sweep control function. Now the sweep control function produces both audible and ultrasound frequencies so you will always be hearing audible tones as well as ultrasonic as the unit sweeps its range as set to. The sweep control also has a rate control, which simply speeds up on slowdowns the changing frequencies from the ultrasonic to the audible range. As you can see these many functions and settings sometimes require the user to find a sweet spot meaning most effective settings that affect his target.

**Addendum Notes**

Unit may be used to protect gardens and ornamentals from unwanted four legged pests, bark control, for control of predators raiding bird feeders.

May be used to determining the feasibility of our larger more high powered units being intended for a target pest problem.
If you get some positive results from this device it is a good chance the higher powered units will work that much better.

If you get zero results then it is best to think of another approach.
You may mark locations of knob pointers for positions you find most effective on your target

Power On / Freq Adj  
Sweep On / Rate Adj  
Int Bat / OFF / Ext 12v  
EXT 12V Power

ACTIVATE
FIRE
ACTIVATE
SWP
ACTIVATE
FIRE
ACTIVATE
SWP

BUTT HANDLE

8 AA CELL HOLDER INSIDE
Setup

- Check the unit over for any damage that could have occurred during shipping or otherwise.
- Verify all knobs are fully counterclockwise and off as noted by the click of the switch knob.
- Remove screws holding the Rear section containing the Speakers.
- Insert eight fresh AA Duracell's or alkaline batteries and note proper contact of the batteries with each other and the connections to the terminals.
- Snap on the battery clip.
- Carefully reinsert the rear panel and insert the screws.

Controls Description and Functions

1. **EXT 12V PWR** is the 2.5 mm power jack for an external 12vdc/115 vac wall adapter
2. **INT BAT – OFF - EXT 12V** is the 3 position power select switch where:
   - “right” is for external power from a wall adapter or in the
   - “left” position is for the internal batteries.
   - “middle” position is removal of power from both sources or “off”
3. **PWR ON/FREQ ADJ** is for manually setting the output from an audible of 5kHz to inaudible 22kHz ultrasound
4. **SWP ON/RATE ADJ** is for adjusting the rate of the changing freq from audible to inaudible ultrasound. Adjustment can be a rapid rate like chirping sound to a slow sicking rate of 5 seconds. Note that sweep range will always be both audible at the low end to inaudible ultrasound at the high end. Sweep is activated by the **ACTIVATE SWP** push button switch on the handle

   *Some will hear as well as feel effect when the SWP IS ON*

**SPECIAL NOTES**

- *Perform following tests with hearing protection or outside to avoid return reflections from walls etc*
- Dogs seem to be effected just above that of human hearing...usually 18 kHz
- Note human sensitivity is maximum on younger females and less on older males. This advantage is used to discourage unwanted teenage gatherings in front of stores or other sensitive areas

**FREQUENCY RANGE**

- Just click on the **power** on **FREQ ADJ** knob. Do not adjust control
- Activate the **FIRE** button and note a piercing audible 5 KHz tone.
- Slowly rotate the **FREQ ADJ** control clockwise and note frequency getting higher and higher until you cannot hear it anymore, but eventually will feel it.
- Adjust **FREQ ADJ** control fully clockwise the frequency will be 21 to 22 KHz. Sensitive ears may hear at close range.
- Slowly rotate the **FREQ ADJ** control counterclockwise to a frequency you can start to hear.
- Deactivate pushbutton switches and rotate **FREQ ADJ** control fully counterclockwise and click off.
SWEEP RANGE  **SOME WILL HEAR AS WELL AS FEEL EFFECT WHEN THE SWP IS ON**

**SWP ON/RATE ADJ** is for adjusting the rate of the changing freq from audible to inaudible ultrasound. Adjustment can be a rapid rate like chirping sound to a slow sickening rate of 5 seconds. Note that sweep range will always be both audible at the low end to inaudible ultrasound at the high end. Sweep is activated by push button on handle.

When you activate the **SWEEP FUNCTION** the frequency now changes between two limits as set by the **FREQUENCY ADJUST CONTROL**. The sweep rate of the frequencies that are being swept will vary depending on where the frequency adjust is set. Example: if you turn THE **FREQUENCY ADJUST CONTROL** full clockwise, that is the highest ultrasonic frequency of the unit. The sweep rate of the sweep range will start from that frequency of 25 kHz and change eventually reaching a lower frequency that could be audible to some people. The **SWEEP RATE CONTROL** just changes the time it takes for the output frequency to change from the highest setting to the lowest setting.

As the **FREQUENCY ADJUST CONTROL** is set lower, the sweep will always start from that lower frequency setting and even go lower. *You will be very much in the audible range if you were able to hear reasonably high frequencies as most younger people are.*

The best approach with a unit like this, where most users are unfamiliar with is to do a little experimenting. This will give you an idea of how the unit should be set for your application at the same time observing the effect on the target.

The combinations of setting for these devices is almost unlimited. The rate of this change is adjustable by the **SWEEP RATE CONTROL** and can enhances the effectiveness of the unit in many applications. You may find however that the sweep may not be required and be disabled by simply clicking the control off. This allows a steady tone as set by the **FREQUENCY ADJUST CONTROL**.

**When you use the unit in the sweep position the whole objective is you scan the frequency of the unit from the high ultrasonic into the high audible or go lower where you can scan a shrieking high sound pressure (SPL) audible sound. The scanning mode in most cases should not be used if it’s going to be around those who are very sensitive to high-frequency hearing as they could be bothered by it.**