Pet Sensor System User Manual (V2)

Operation:
The unit has 2 pushbuttons. When viewed from the front with the shock terminals pointing downward, the **MODE** switch is on the right and the **SHOCK** level is on the left.

Turn the unit on by pressing and holding the **MODE** button for 2-3 seconds. The middle horizontal segment of the display will blink once every 2 seconds when the unit is powered on.

To turn the unit off, press and hold the **MODE** button for 2-3 seconds. The display will stop blinking.

To enable and select different shock levels, first press the **MODE** button. The display will show a number between 0 and 9. The number 0 indicates that the shock feature is disabled. A number between 1 and 9 indicates that the shock feature is enabled with 1 being the lowest shock voltage (80 volts) and 9 being the highest shock voltage (160 volts).
To change the level press the **SHOCK** pushbutton (left pushbutton) to increment the shock level. To disable the shock feature, repeatedly press the **SHOCK** pushbutton until the number 0 is displayed.

Once the desired shock number is selected, pressing the **MODE** pushbutton will return the LED display to the flashing of the middle segment, or the display will automatically return the the flashing display after 5 seconds if no pushbuttons are pressed.

Alarm State:
When the unit is flashing the middle segment of the LED display, the unit is actively listening the beacon tags. If an area protection tag is received, the unit enters the alarm state. The unit emits an audible beeping tone and the vibrator vibrates for 3 seconds. If the shock level is enabled, any settings other than 0, the shock voltage is generated during the 4th second. This 4 second pattern repeats for 3 times at which time the shock stops, but the tone and vibration continue as long as the pet remains in the area. The shocking will only begin again if the pet leaves the area for a minimum of 60 seconds.

Test Mode:
While the unit is on, pressing both pushbuttons simultaneously will generate a sequence of test shocks at the currently selected shock level for 10 seconds. If the shock is disabled, meaning the the shock level is 0, no shock will be generated. The tone buzzer and vibrator also are active during test mode.

Other Notes:
The range (size of detection area) is fixed at approximately 3 to 6 feet. Objects near the tag can influence the shape and size of the protection area. Metal objects can block the tag signal if placed in front of the tag.

If the pet runs too fast through the protected area, it may not detect the pet's beacon. The beacons only send data on the order of 3 times per second.

The battery will last more than 8 hours under normal use before requiring charging.

Provisions have been put into the system so that the detection range can be increased or decreased by adjusting the beacon's transmit power settings. This is done by using the FeasyBeacon app on a smart phone. It is not user friendly, but allows for experimentation of the system. It would be possible to make our own app to allow easy modifications to the detection area.

Battery Charging:
Any common 5 volt phone charger will charge the unit. A USB-C cable is required.

When the unit's battery is low, the letter 'L' will flash on the display instead the of the middle segment.

To charge the unit, plug the AC adapter into the unit. The display will show the letter 'C' to indicate that it is charging the battery.

Once the unit is fully charged, the display will show the letter 'F' to indicate that the battery is fully charged.

Any time that the unit is unplugged from the AC adapter, the unit will enter the ON state and the display will blink the middle segment.

It is possible to turn off the unit while it is charging so that nothing is displayed. It will continue to charge while in this state. If the unit is off and then plugged into a charger, nothing will be displayed even though it is charging.

Battery charging time from a completely discharged battery is less than 4 hours.

Beacons:

To turn the beacon ON, press and hold the switch for 3 seconds. The LED will blink 3 times.
To turn the beacon OFF, press and hold the switch for 3 seconds. The LED will blink once.
If no LED is illuminated from pressing the pushbutton switch, the battery may be dead.

The beacons use a standard CR2032 battery and can be changed by unsnapping the two halves of their plastic case using a small flat blade screwdriver. The battery life is estimated to be greater than 6 months.