## FCC ID: X4USPC Exhibit 9: Operational Description

The wireless device releases clay pigeon targets for shotgun sports such as Sporting Clays, Skeet and Trap. The device controls up to two target launches at any given time. The device can be automatically activated by a voice command or manually by pressing a key on the keypad.

The device is mounted on a stand approximately 3' from the shooter.

The device operates from two AA batteries. A DC to DC converter regulates the power supply to 3.3Vdc.

Upon detecting a voice or a manual key command, the microcontroller (MCU) encodes the command into serial data packet comprising 5 bytes: Byte[0:3] = Address, Byte[4:5] = Launchers ID, and sends the data to the Data port of the ASK transmitter. The data is preceded by a short preamble to wake the transmitter. The transmitter is a typical OOK, whereas the SAW oscillator only oscillates during a high state (data pulse) at the data input. The data rate is 4.8 kbps and the duration of a packet's transmission is approximately 10mS. The transmission is repeated 2-3 times over a period of 100mS with blank spaces between packets. Transmission stops after 100mS and will not resume until a new command is detected. In Manual mode a new command required releasing the key and pressing is again. In Voice Activated mode a new command cannot be acquired in less than 4 Seconds.

The short helical antenna is connected with a screw directly to the P.C. Board. There is no access to the antenna and it cannot be replaced.