

## Technical Description

### Description of the system:

The combination of the In Vehicle Unit (IVU) and the keyfob HandHeld Unit (HHU) form an RF based two-way remote vehicle start system. The system operates at frequencies between 904 and 923.6 Mhz using Frequency Hopping Spread Spectrum transmission.

### Description of Operation:

When the remote start button is pressed on the keyfob (HHU), a start command is transmitted to the vehicle's IVU. The IVU responds by sending a confirmation signal back to the keyfob causing the keyfob to emit a short beep and flash an LED one time. This tells the operator that the vehicle has received the command and is going to start the engine.

Once the engine has started the vehicle (IVU) sends another message back to the keyfob causing it to beep (and LED flash) two times.

If the keyfob's remote start button is pressed and held down for greater than 4 seconds, it will send a vehicle turn off command to the IVU. The engine will be turned off and another message will be sent back to the keyfob causing three beeps (and LED flashes). The operator then knows that the vehicle has been successfully turned off.