

Operating Descriptions

Operating Principle: The DC power of Parking Assistance system is controlled by power of back light of vehicle. When vehicle is not in reverse gear condition, the Parking Assistance System is deactivated. When the vehicle is engaged in reverse gear, the system is activated. The System drive the ultrasonic sensor(detector) penetrate the 40KHz ultrasonic wave and receive the reflecting wave signals. The signals are amplified ,filtered and operated by SCM then form datum, the datum are transmitted to receiver by radio transmitter.

In schematics,

1. U1 is single chip unit(SCM), that is core of controlling and operating
2. U4, Z1, Z2, Z3, Z4 and their near circuits are penetrating circuits of ultrasonic wave sensor and drive the sensors penetrate the 40KHz ultrasonic wave
3. U2 and its' near circuits are amplifying and filtering circuits
4. U5 is transmitting module, operating frequency is 433.92 MHz, transmitting power is less than 40w, operating mode is duty cycle transmitting , the transmitting time is about 30-40ms, the silent time should be more than 10 s.