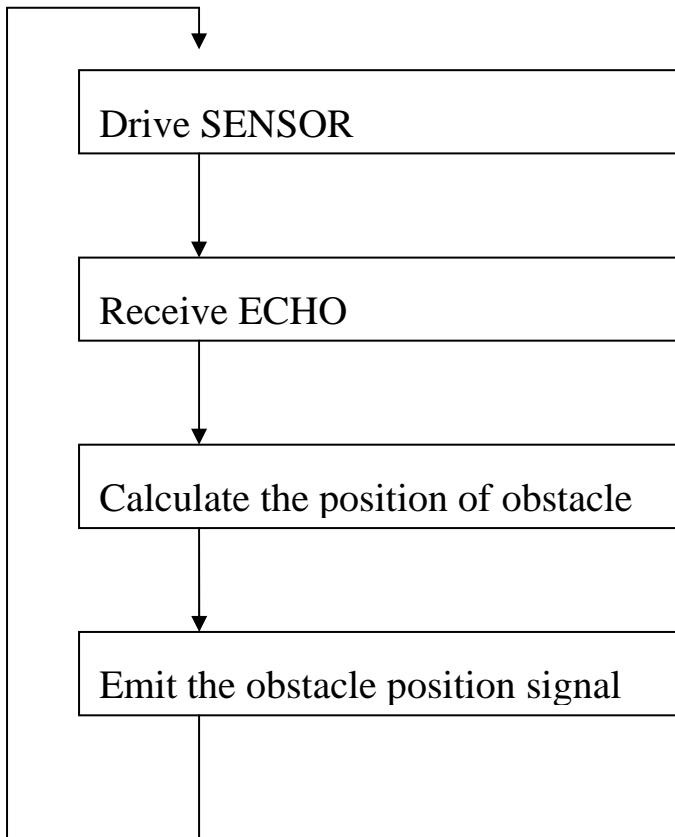


Power regulator transfers DC12V to logic voltage DC5V. Power monitor circuit detects power status. Eeprom memory stores system configure parameters. Signal process circuit drives ultrasonic sensor and deal with the feedback signal. MCU is in charge of logic control and transfers the last result through the RF module.

Operation Chart :

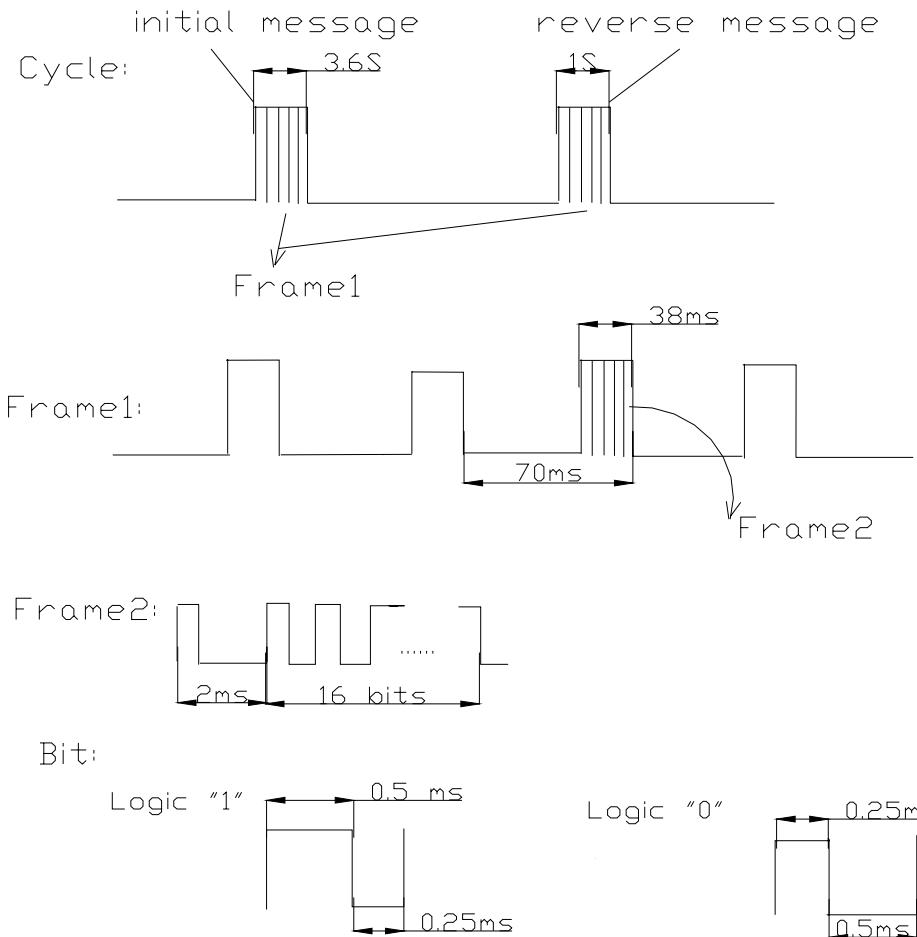


The above operation cycle is 70 ms. The System emits the obstacle position message once or twice every 70 ms. This message is composed of 16 bits. The total length is less than 38 ms, including sync-header 2 ms. The trigger and stop of transmission signal is controlled by control module, Read following timing chart :

When the vehicle starts to reverse, the system starts to emit the initial message to the indication. The trigger and stop of transmission signal is controlled by control module, the cycle is within 3.6 s. During this cycle, the transmission signals are the same. Read

following timing chart :

During the operation of system, when new reverse message happens, the transmission trigger again, the cycle is within 1 s. During this cycle, the transmission signals are the same , Read following timing chart :



Transmitting a 3.6S initial signal when the system is beginning. System will launch a 1s signal when detect an obstacle. There is no fixed interval time between two launchs, it is random. When detect an obstacle again, only launch a 1S signal.

If the sensor continuously received echoes from an obstacle, it transmit only one message. The first transimision of 3.6second is only transmitted at the beginning of the system.

The antenna of EUT is composed of two parts. One part is printed on the PWB and the other part is a flexible wire connected to the PWB by means of Welding.