

DNR84 operation description

Device operation Frequency Range: 2407MHz to 2471 MHz

Antenna Type: integrated antenna

Antenna max Gain: 0dBi

Modulated Type: GFSK

The RF IC is MX5326L, it has the function of Receive and emission signals, and also include modulation & demodulation & internal power amplifier.

The 16M external crystal oscillator is the basic clock for both controller and car. The car only transmit the pairing signal at the moment of device power on. It will be in receiving mode and no longer emission signal once the car pairing ok with the controller.

Signal emission for controller:

When transmitter and car is turning on at normal operation, the Pin4 & Pin5 & Pin6 & P7 of MX5326L's voltage will be changed and be captured. After the signal been modulated in the MX5326L it will be send out from Pin1 to antenna and into the air.

Signal receiving for the car:

When the car received the signal from controller by antenna, the modulated signal will from Pin1 of the MX5326L to the internal demodulator, output from Pin6 & Pin 7 of the MX5326L to MCU KS8BE75AS, Then the decoded signal will send to motor and drive the car move as we wanted. The car have 4 IR modules to detect motor speed,

motor speed is adjusted by PWM signal from MCU.

Power supply :

The controller power supply is 3.0v battery. The Car is 9.6V chargeable battery, and the power IC U1 LR8061CC3TR30 convert the battery voltage from 9.6V to DC 3.3V for supply to RF module & speed detector circuit and MCU KS8BE75AS .