

EXPOSITORY STATEMENT/DESCRIPTION

FCC ID:AEKA03749R

The BMX receiver relaxation oscillator receives the RF signal from it's associated transmitter then amplifies and detects the control signals and subsequently supplies the digital control signals to the comparitors and motor drive circuits for controlling the movements of the receiver.

The superregenerative receiver is comprised of the superregenerator relaxation oscillator circuit, which is comprised of Q1, and it's associated passive components, and one LSI chip (IC1 - RX5B). The digital control signals are then conditioned by the LSI chip and sent to comparator circuits controlling the vehicle's movements. Two comparator circuits are used to control two motors, M1 and M2. M1 controls the turning of the vehicle, and M2 controls the forward and stop functions of the vehicle.

The receiver is powered by 5, AA, 1.5 VDC batteries. The receiver operates on a fixed frequency of 49.86 MHz. No external grounding is used or required. The only tuning required is to tune the relaxation oscillator, L1, to receive the RF from its associated transmitter, and is performed at the manufacturing facility by qualified technicians.