STUNT SCOOTER # 97596
49.860MHz RECEIVER OPERATIONAL DESCRIPTION

The Stunt Scooter is a radio controlled toy scooter . It operates on 6 volts supplied by four 1.5 volt alkaline AA batteries. It is designed to operate on a single fixed frequency in the 49.82-49.90 MHz band. See the attached block diagram and schematic.

The modulated RF signal from the transmitter induces an electrical signal into the scooter's permanently attached internal wire antenna . The electrical signal is selectively amplified by a super regenerative input circuit (Q1,L2,L3,C2-C5). The signal is then capacitively coupled (via C8) to an integrated circuit (RX2) were the signal is further amplified and decoded. A digital output from the RX2 drives a transistor drive circuit (Q3,Q5) for controlling the speed of the drive motor. Another digital output from RX2 drives a second transistor pair (Q4,Q6) to provide dynamic braking of the drive motor. A pair of digital outputs from RX2 drives a full H-bridge drive circuit (Q9-Q12) for controlling the speed and direction of the steering motor.

All tuning and verifications are performed by the manufacturer and there are no adjustments which can be made by the user. No external ground is required or used with this receiver.