

0SP000IDERMAN MONSTER TRUCK # 80412
49.860MHz RECEIVER OPERATIONAL DESCRIPTION

The Spiderman Monster Truck is a full function radio controlled toy truck . It operates on 6 volts supplied by 6.0V Nicad battery pack. 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 truck's permanently attached wire whip antenna . The electrical signal is selectively amplified by a super regenerative input circuit (Q1,T1,L1,C2-C5). The signal is then capacitively coupled (via C8) to an integrated circuit (RX2C) where the signal is further amplified and decoded. A pair of digital outputs from the integrated circuit drives a full H-bridge drive circuit (Q12-Q15) for controlling the speed and rotational direction of the drive motor. A second pair of digital outputs from the integrated circuit drives a second full H-bridge drive circuit (Q7-Q10) for controlling 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.