

MINI CYCLE HONDA H2534 49.860MHz RECEIVER OPERATIONAL DESCRIPTION

The Mini Cycle Honda is a full function radio controlled toy. It operates on 6volts supplied by four 1.5volt alkaline AA batteries. It is designed to operate on a single fixed frequency in the 49.860MHz. See the attached block diagram and schematic.

The modulated RF signal from the transmitter induces an electrical signal into the toy's looped wire antenna . The electrical signal is selectively amplified by a super regenerative input circuit (Q1,T1,L2, L3,C1-C6). The signal is then capacitively coupled (via C8) to an integrated circuit (U1) where the signal is further amplified and decoded.

A pair of digital outputs from the integrated circuit (U1) drives a full H-bridge drive circuit (Q11-Q14) for controlling the steering direction of the solenoid . A second pair of digital outputs from the integrated circuit (U1) drives a second drive circuit (Q2,Q3,Q4,Q6) for controlling the forward & brake of the motor.

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