

Expository Statement/Operational Description
AEKA10127 - JACKKNIFE

The JACKKNIFE R/C Transmitter (FCC ID:AEKA10127) is a 27.145 MHz R/C transmitter.

The transmitter uses a fixed antenna approximately 8 inches in length.

The RF section contains the RF carrier oscillator section and an amplifier section. The RF carrier frequency is generated using Q1 (N-P-N transistor) in conjunction with a crystal (X1=27.145 MHz) configured in an oscillator circuit. The RF amplifier circuit consists of one transistor (Q2) coupled to the antenna via C6. The matching circuit is comprised of C7, C8, L3 and L4.

The modulation, baseband control signals, are generated within the LSI (Large Scale Integration) IC, IC1 TX2C. Except for the control switches (commands for vehicle movement), IC1 conditions all commands and modulates the carrier (RF) by injecting the baseband signal into the input of the RF amplifier.

The transmitter operates using one 9.0 VDC battery. The transmitter does not need or use external grounding for operation.