

JADA TOYS CO., LTD

Project No. : 83196, 83197

Model Name : 1:16 Battle Machine RC (Single and Twin Pack)

Transmitter and Receiver Circuitry Operating Description

In Transmit Mode:

Transmitter: When the power switch K1 turns to “ON”, Q1 and the Y1 crystal produce a carrier frequency, press one of the keys K2, R, L, F, B, The Encode IC U12501B pin8 gives the signal out to Q2, and mixed the carrier frequency signal, after Q2 amplifier the signal and transmit from antenna. There are three sets of modulation signal can be selected by Band Selecting Switch S1.

A 9V battery supplies energy.

In Receive Mode:

Receiver: When the power switch S1 turns to “ON”, The modulation signal receive from the antenna and pass to local oscillation and demodulation from Q1, The encoding signal transfer to Signal Amplifier IC IC1 R303, Encoding IC IC2 SN8P2501B and Voice IC IC3 SNC113, after decoding the direct control signal go to the motor driver unit. The Q11,Q12,Q13,Q14,Q115 & Q16 control motor M2 to control Forward and Backward function, the Q5~Q10 control motor M1 to control Left and Right function.

In Auto Mode:

Receiver: When the Auto Mode Switch S2 turns to “AUTO”, the Encoder IC IC2 SN8P2501B Pin 12, 13 and 14 communicate with Voice IC IC3SNC113 Pin 3, 4 and 18, and controls motor driver of M1 and M2 to perform the Auto motion.

In Battle Mode:

Receiver - Fire Action: The modulation signal receive form the antenna through Q1 and Signal Amplifier IC IC1 R303 to Encoding IC IC2 SN8P2501B, the Encoding IC controls LED D1 lights up and IR emitter D2 to give out an Infrared signal.

Receiver - Being Hit: The IR Receiver HM338 receive an IR signal and pass to Pin 2 of Voice IC SNC113. The Voice IC controls Health indicating LED D3, D4 and D5 and Speaker to play sound FX.

Receiver - Reset: Press the Reset switch S3 to reset the Encoding IC SN8P2501B and Voice IC SNC113. The Health Indicating LED D3, D4 and D5 will back to original.

Energy is supplied by 4x AA size (1.5V) battery..