# 1/6<sup>th</sup> Chrysler 300C Receiver Circuit Function Description

The 1/6<sup>th</sup> Chrysler 300C receiver requires 4PCS AA battery and 7.2V

Nicd rechargeable battery pack for its power. It can driver, retreat, turn left, turn right. There are more function like: working lights, fender lights, IC sounds, MP3 sounds, try me.

## 1. Voltage Regulator:

Contains POWER SWITCH, SOUNDER SWITCH, TRY-ME SWITCH and its associated components.

## 2. RF Amplifier:

Formed by a NPN transistor Q1 and its associated components, it amplifies the AM signal then feed it into the AM receiver module.

### 3. RF Receiver & Decoder:

Contains U1(SPRC206A-C) and its associated components. The U1 receives and decodes the serial bit-stream data and amplifies the signal. The decoded single input U2.

## 4. Voice Synthesizer:

Contains U2 (SPRC122A) and its associated components. U2 receives the control information from U1 or protective circuit. Then the internal controller sends out different signals to stop the power, to control the speaker, body LEDs, fender LEDs, and try me power.

### 5. Protector Circuit:

Formed by compactor U3 (LM393),U4 (LM339) and its associated circuit which inspects the low voltage of 4PCS AA battery, 7.2V rechargeable battery pack and the high current.

### 6. Diver Circuit:

- 6.1 Driver 1: Forward / Back Motor driver comprise transistor Q7, Q2, Q10, Q11, RL1, RL2, Q14 and its associated components.
- 6.2 Driver 2: Left / Right Motor comprise wiper Q18, Q19, Q20, Q22, Q23, Q26, Q27, Q25, Q24 and its associated components.

## 7. SWITCHS FOUNCTION

Power switch have 4 locations, sound switch have 3 locations.