

# **Circuit Description**

## **Transmitter**

- 1.Oscillator & Mixer (Q1):** A kind of radio frequency controlled Oscillator circuit via transmitting antenna is made of X-TAL, transistor (Q1, Q2, Q3, Q4), resistor, capacitor, coil (T1, T2).
- 2.Modulator (Q7, Q8):** A circuit to shift pulse position to MIX occurred by IC1 and Q5, Q6
- 3.Pulse train encoder & switch (IC1, Q5, 6, 7, 8):** A circuit to generate designated pulse to operate servosystem inside the moving vehicle. it is consists of IC (IC1), resistor, capacitor, transistor (Q5, 6, 7, 8), switch and volume.
- 4.Reverse switch (s2, 3, 4):** A switch which can change moving vehicle's direction by servo's movement.
- 5. Volume(VR1,2):** A circuit which can change the wide of pulse train. this is installed into transmitter's stick assembly and adjust moving direction of pulse to control servo's rotation direction or angles.
- 6.RF Driver Amp.(Q3):** A circuit to amplify the mear frequency power mixed with pulse from generator to meet needed amplifying power increase.
- 7.RF Out(Q4):** A circuit to amplify the radio frequency generated from RF Driver Amp.
- 8. Filter(T1,T2,L3,L4):** A circuit to filtering unnecessary spurious frequency which is mixed with needed frequency from RF power amplifier.