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Radio Controller H6C-TX2038

Functional Description

The EUT is a radio controller for use to control a radio control car, boat, plane or robotic..

The controller circuit comprises a rf generation circuit and a modulation circuit.

In the rf generation circuit, rf frequency carrier is generated continually by a crystal oscillating at 27.145 MHz when the power is switched on. However the rf signal will not further transmit forward to second stage for amplification and radiates via antenna matching network until there is presence of a modulating signal (the control signal).

In the modulation circuit, modulating signal is generated by an encoder IC. By changing the values of the variable resistors or applying a zero volt (ground the input pins) on the controller IC, a series of digital data bits will be generated. The level of data bits are high enough to switch on and off (ON/OFF keying) a control gate allowing the rf carrier to pass through to next amplifying stage and hence radiates to atmosphere via the antenna.

Antenna is a telescopic design. The controller is powered by a 9V dry battery. No supply ground or signal ground is available.