

Dickie Spielzeug GmbH & Co. KG; Module 49010TX

Circuit Description

(With reference to Circuit Diagram and Blockdiagram)

The circuit of module 49010TX is basically divided in four parts:

1. Oszillator (carrier frequency)
2. Modulation of signal
3. RF amplifier
4. Output circuit with antenna

The Oszillator unit produces an carrier frequency of 49,860 MHz by using a quartz crystal, which is coupled via a transistor.

The modulation is gained by an IC, beeing operated by the user trough the switches.

Carrier and modulated signal are superposed at the base of a transistor, which amplifies the modulated carrier.

The output circuit, beeing realised by capacitors and inductances matches the RF amplifier to the antenna providing RF-power being transfered to the antenna.