

Applicant:

Heath Company, a Division of DESA International Inc.
2701 Industrial Dr.
Bowling Green, KY. 42102

Manufacturing Location:

Heath Company LTD.
Rm. 704 Star Centre
443-451 Castle Peak Rd.
Kwai Chung, Hong Kong

Circuit Description

The W-33A-TX is a Wireless Remote Control Transmitter to be sold to operate our Heath Zenith receivers that are used to control lighting, appliances and other similar loads. Currently, this transmitter will activate receivers in our SL-6133, SL-6135, SL-6136, SL-6138 and SL-6139 products. It will initially be packaged with the SL-6133-RX, SL-6136-RX and SL-6138-RX receivers and case style may vary. A 9V battery powers the transmitter.

Several “channels” are available which correspond to the different crystal modulation frequencies used and include crystals within the 28 k to 38 kHz range. Typically 28 kHz, 30 kHz, 32 kHz, 32.768 kHz and 38 kHz (appropriately marked “A” thru “E”). There is one front cover toggle switch (momentary contact) that activates the channel (only one crystal is use at a time). The receivers are manufactured with one of those crystal frequencies installed and appropriately marked...“ A” thru “E”.

Transistors Q1 and Q2 form the crystal oscillator used for modulation. This oscillator operates continuously at low power whenever the battery is installed. This eliminates the start-up drift of the modulation frequency, which could occur when the transmitter is activated.

Integrated Circuit (IC) “U1” sections –A and –B form a retriggerable monostable, which sets the minimum transmit time to approximately 150mS, eliminate contact bounce and short burst transmissions.

Transistor Q3 is the “rf” oscillator and is factory adjusted to 315 MHz by capacitor “C6”. The output is activated when pin 11 of U1 section –D is set at a logic high and deactivated when set at logic low. The antenna consists only of the tuning loop PCB trace (foil).

Alignment

There are no user accessible adjustments. During manufacture, adjusting the tuning capacitor “C6” to 315 MHz sets the carrier frequency.

Service

There are no user serviceable parts in this product.

List of Generated Frequencies

315 MHz “rf” oscillator stage.

Modulation: crystal controlled, between 28 kHz and 38 kHz.