

TECHNICAL DESCRIPTION OF OPERATION

LP59003T

The remote transmitter (described in the attached exhibits as LP59003T) is a device that detects infrared (IR) light pulses from a hand-held remote control and uses radio frequency (RF) to link it back to its original infrared-controlled component, such as a VCR or stereo receiver, via the corresponding remote receiver.

A) The remote transmitter is not used for continuous transmission.

1) No voice communications are used.

2) There are no transmissions at predetermined intervals.

B) No polling or supervision transmissions are made.

C) The remote transmitter operates using a manual push buttons on the attached hand-held remote control that automatically deactivate the remote transmitter when released.

D) The remote transmitter does not automatically activate: Only manual operation is possible.

E) The remote transmitter is fixed tuned to transmit at 444 MHZ RF signal. The 444 MHZ is modulated by an IR remote control pulse train.

As referred to in the attached exhibits, the remote transmitter is powered by a 12 volts DC battery. The circuit contains one (1) IR diode detector and two (2) transistors. D1 is responsible for detecting the generated IR pulse train for the desired function. Q1 is a switch for activating Q2 which supplies power to Q2 while there is a key being pressed on the attached hand-held remote control. Q2 is an oscillator generating the 444 MHZ RF signal through a tuned tank circuit. When IR remote control key has been pressed, Q1 remains switched off therefore there will be no power through the oscillator circuit and no transmissions can occur.

When a hand-held remote control key has been pressed, D1 detector will cause Q1 transistor to be switched On/OFF at the remote control pulse train rate, causing the oscillator to generate a burst of RF signal. The transmission will automatically cease when the hand-held remote control key is released.