

July 10, 2002

Mr. Mike Nicolay
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Response to E-mail dated June 18, 2002 regarding FCC ID: LP59003T

Dear Mr. Nicolay,

The purpose of this letter is to respond to your questions regarding the recent certification of an intentional radiator manufactured by Kidder Industrial Limited.

The open issues you stated are as follows:

1) Most of the component values on the schematic could not be determined.

I have included a replacement schematic which clearly shows all component values. It is labeled as Exhibit 1.

2) The technical description and the block diagram do not address if/how the required automatic deactivation is done.

I attached the technical description which was included with the application and labeled as Exhibit 2. Paragraph "C" of this technical description states "The remote transmitter operates using manual push buttons on the attached hand-held remote control that automatically deactivate the remote transmitter when released." The subject device provides no operator controls or buttons. The subject device attaches to the front end of a hand-held "IR" remote control. It receives "IR" signals from that remote control which, when present, initiate the "RF" transmission as well as regenerate the original "IR" signal for output. When the push button on the remote control is released, the subject device ceases to transmit immediately. This device is a manually operated transmitter which meets the requirements of 15.231(a)(1).

3) The radiated data sheets do not contain information such as antenna factors used, associated cable losses, etc.

I agree that this information was either missing or not straight forward. Included on the first radiated emissions sheet is a column titled "CORR FACTOR dB". These numbers express the total correction applied which include the antenna factor, cable loss and preamplifier gain. The data sheet listing emissions above (1) GHz did not include this information. I have attached a detailed listing of all the corrections used for each frequency reported as Exhibit 3.

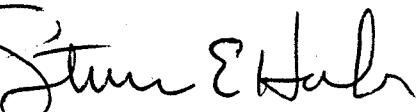
4) It is unclear how the measurements were performed above 1 GHz.

The measurements performed above (1) Ghz were collected with the test equipment listed on page (7) of the test report. All measurements were performed at a (3) meter distance. Measurements made above (1) GHz were performed using a average detector and a resolution bandwidth of (1) MHZ.

I have included a sample of the subject device for your review.

I believe I have addressed all of your listed concerns but should you require additional information, please contact me directly.

Respectfully,



Steven Hoke
EMC Site Manager

cc: Sid Sanders - Timco Engineering

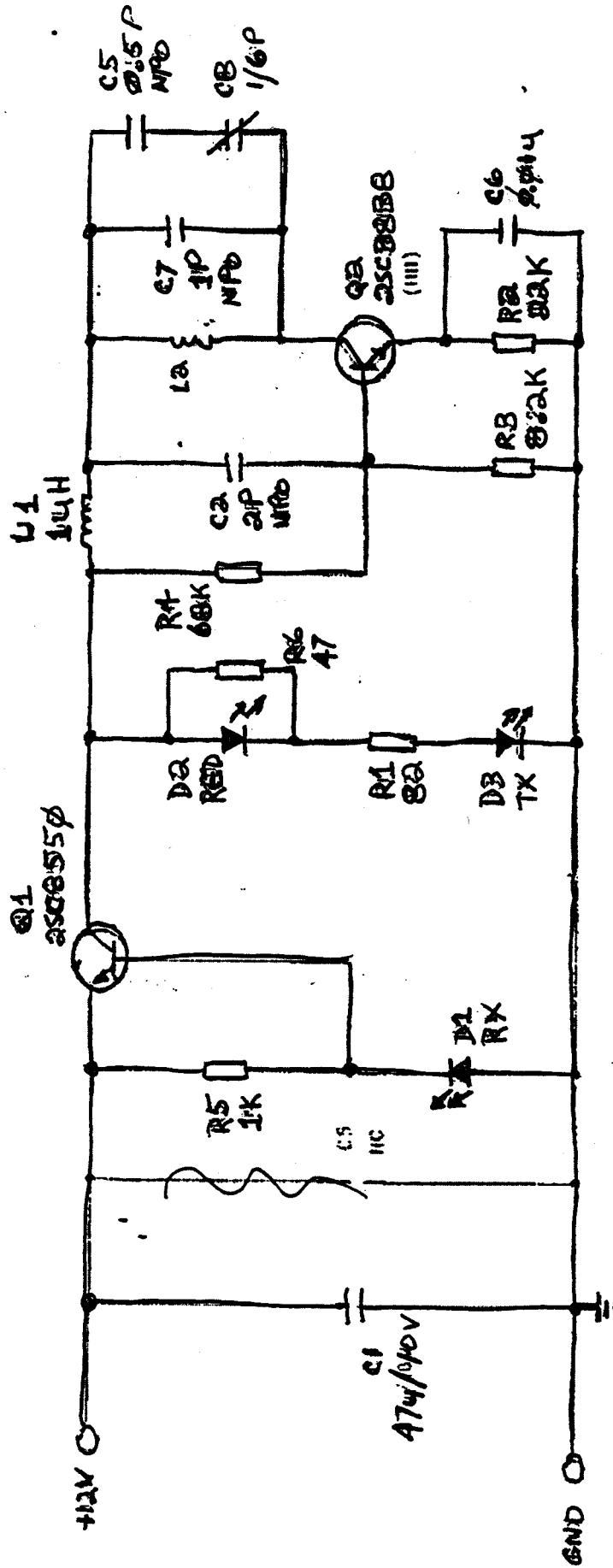


Exhibit #1

FCC ID: LP59003T

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.

**Radiated Emissions Correction Factors
Related to FCC ID: LP59003T**

Frequency (MHz)	Observed Level (dBuV)	Antenna Correction Factor (dB)	Cable Loss (dB)	Preamp Gain (dB)	Corrected Level (dBuV/m)
443.5	63.4	16.8	2.0	26	56.2
887.8	56.8	23.2	2.9	26	56.9
1,330	58.4	26.7	3.3	32	56.4
1,773	59.6	28.2	5.1	32	60.9
2,221	47.8	29.9	5.9	32	51.6