

DESCRIPTION_OF_DEVICE

The device is a low power transmitter operating in the 26.96 - 27.28 MHz range for remote control of toy cars.

A crystal controlled oscillator drives an RF amplifier modulated by an integrated circuit encoder (see block diagram exhibit).

COMPLIANCE_WITH_PART_15,_PARA._15.227

15.227(a,b) The field strength of the radiation emission was measured and found to comply with the limits established by 15.227(a) and 15.227(b).

No emissions within the 26.96 - 27.28 MHz band exceeded 10,000 uV/m; emissions outside of this band did not exceed the limits of Para. 15.209. (See data of Table 1.)

DATA

Tables referenced above follow immediately after this page. Description of measurement procedures and test equipment used in the measurements follow.

PROCEDURES,_RADIATED_SPURIOUS_EMISSIONS

The field strength of the radiated emissions from the transmitter was measured at a distance of 3 meters. The spectrum was scanned from 30 MHz to 1000 MHz using a Tektronix 494P spectrum analyzer and HP 8447D low-noise preamplifier.

The test sample was placed on a rotatable 80 cm high wooden stand. The receiving antennae, placed 3 meters from the test sample, were Eaton biconical or log periodic arrays.

The attached antenna was oriented in both vertical and horizontal positions for the tests.

Fully charged internal batteries were used.

Measurement procedure included recording the worst-case field strength for receiving test antenna polarization, test antenna height variation from 1 meter to 4 meters and test sample rotation, and test sample antenna in both vertical and horizontal planes.

TABLE 1

RADIATED FIELD INTENSITY
Measured at 3 meters
FCC Part 15.227

<u>Frequency To Which Tuned (MHz)</u>	<u>Frequency of Emission (MHz)</u>	<u>Meter Reading (dBm) (P)</u>	<u>Antenna Factor (dB)</u>	<u>Field Intensity uV/m @ 3m</u>	<u>FCC Limit uV/m @ 3m</u>	<u>dB to Limit</u>
27.000	27.000	-45.6V	11.8	4570.9	10,000	- 6.8
27.000	54.000	-77.2V	9.8	95.5	150	- 3.9
27.000	81.000	-80.0V	12.1	90.2	150	- 4.4
27.000	108.000	-84.0V	8.8	38.9	150	-11.7
27.000	135.000	-87.6V	14.9	51.9	150	- 9.2
27.000	162.000	-92.8H	17.0	36.3	150	-12.3
27.000	189.000	-95.6H	14.0	18.6	150	-18.1
27.000	216.000	-92.4H	11.8	20.9	150	-17.1
27.000	243.000	-96.8V	11.8	12.6	200	-24.0
27.000	270.000	-94.8V	14.4	21.4	200	-19.4

Frequency range of 30 to 1000 MHz was scanned. No signals exceeded FCC limits and all signals greater than 20 uV/m @ 3m are shown above.

(P) = Worst-case test antenna polarization.

RADIATED FIELD INTENSITY
FCC ID: IYF2CH400-27

Table 1

AC LINE CONDUCTED MEASUREMENTS

No ac line conducted measurements were made since the device is battery operated only.