

Statement of Declaration

FCC ID : Y9XHPIRACING00001

Product : 3CH 2.4GHz FHSS RADIO SYSTEM

Model : TF-40

1. Output power and channel separation of a Hopping device in the operating mode :

In the operating mode, device turn on the RF carrier, TX data with GFSK modulation, in this method, each bit of data in a byte is encoded with multiple bits using a Pseudo Noise code(PN code).In this way the transmitters and receivers must use the same PN code and channel to communicate, then turn off the RF carrier with the specification of Dwell time. The output power and the channel spacing is not change in the operating mode.

2. Frequency range of a Hopping device :

Hereby we declare that the frequency range of this device is : 2407~2477MHz.

3. Example of a hopping sequence in operating mode :

Example of an operating mode with 71 hopping sequences :

13,9,5,17,29,25,21,33,45,41,37,49,61,57,53,65,6,73,69,10,22,18,14,26,38,34,30,
42,54,50,46,58,70,66,62,74,15,11,7,19,8,12,16,20,75,24,28,72,31,71,68,23,67,27
,32,64,35,63,32,60,52,59,36,40,55,51,39,48,56,43,47.

- 4.Dwell time in operating mode

The dwell time in operating mode is independent from the TX data. The calculation for a period is as follows : Dwell time=time slot length *number of hopping channels. The time of occupancy in the specified 28.4 second period (71 channel *0.4s) is equal to $28.4 * (\# \text{ of pulse in } 28.4\text{s} / 28.4) * \text{pulse width}$.

Pulse width=9.4ms;#pulse in 28.4s=13;

Time of occupancy= $28.4 * (13/28.4) * 9.4=122.2\text{ms} \leq 400\text{ms}$

5. Channel Separation in operating mode

The normal channel spacing of the Hopping system is 1MHz independent of the operating mode.