

# FCC TEST REPORT

for

## 2.4G Wireless Mouse

Model No. : 82-801

FCC ID : WSN82-801

Operating Frequency : 2402-2480 MHz

Applicant : Earth Trek (Hong Kong) Limited  
Unit 503, 5/F., Silvercord. Tower 2, 30 Canton Road, Tsimshatsui,  
Kln., Hong Kong

Regulation : ***FCC Part 15.107 Subpart B***  
***FCC Part 15.109 Subpart B***

Prepared by : AOV Testing Technology Co., Ltd  
AOV Building, Xueyuan Road East, University City, Shenzhen  
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Test Date : October 5-13, 2008

Date of Report : October 16, 2008

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## TEST REPORT DECLARATION

Applicant : Earth Trek (Hong Kong) Limited  
Manufacturer : Earth Trek (Hong Kong) Limited  
EUT Description : 2.4G Wireless Mouse

**Test Procedure Used:**

**FCC Part 15.107, 15.109 Subpart B**

The E. U. T. listed below has been completed RFI testing by Shenzhen AOV Testing Technology Co., Ltd at the test site of Bontek Compliance Testing Laboratory Ltd. And the Interference emissions can pass **FCC CLASS B** limitations.

The test configurations and the facility comply with the radiated and AC line conducted test site criteria in **ANSI C63.4-2003**.

Date of Test:

October 5-13, 2008

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Prepared by:



Project Engineer

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Reviewer :



Project Manager

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## 1. GENERAL INFORMATION

### 1.1 General Information

Applicant : Earth Trek (Hong Kong) Limited  
Unit 503, 5/F., Silvercord. Tower 2, 30 Canton Road,  
Tsimshatsui, Kln., Hong Kong

Manufacturer : Earth Trek (Hong Kong) Limited  
Unit 503, 5/F., Silvercord. Tower 2, 30 Canton Road,  
Tsimshatsui, Kln., Hong Kong

### 1.2 Test Facility

Test Firm : Bontek Compliance Testing Laboratory Ltd.  
Certificated by FCC, Registration No.: 338263  
Address : FL.1, Building H-3, Hua Qiao Cheng East Industrial Area  
Qiaocheng East Road, Nanshan, Shenzhen, P.R.China  
Tel : 86-755-86337020  
Fax : 86-755-86337028

### 1.3 Test Instrument Used

No.	Equipment	Manufacturer	Model No.	S/N	Calibrator date
1.	EMI Test Receiver	R&S	ESPI7	100097	2008-2-22
2.	Single Power Conductor Module	FCC	FCC-LISN-5-50-1-01-CISPR25	07101	2008-2-22
3.	EMI Test Receiver	R&S	ESCI	100687	2008-2-22
4.	Amplifier	HP	8447D	1937A02492	2008-2-22
5.	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2008-2-22
6.	Horn Antenna	SCHWARZBECK	BBHA9120A	B08000991-0001	2008-2-27
7.	High Field Biconical Antenna	ELECTRO-METRICS	EM-6913	166	2008-2-22
8.	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	811	2008-2-22
9.	Remote Active Vertical Antenna	ELECTRO-METRICS	EM-6892	304	2008-2-22
10.	Teo Line Single Phase Module	SCHWARZBECK	NSLK8128	D-69250	2008-3-31
11.	Positioning Controller	C&C	CC-C-1F	MF7802113	2008-2-22
12.	Triple-Loop Antenna	EVERFINE	LLA-2	607004	2008-2-27
13.	10dB attenuator	SCHWARZBECK	MTAIMP-136	R65.90.0001#06	2008-2-22

### 1.4 Description of Test System

PC	DELL	DCSM
Monitor	DELL	DG335H
Printer	EPSON	9330A
Mouse	DELL	MOC5UO

## 2. POWERLINE CONDUCTED EMISSION TEST

### 2.1. Test Standard

15.107

### 2.2. Limits

Frequency MHz	Limits (dB $\mu$ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes:

1. \*Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

### 2.3. Test Procedure

The EUT is put on the table that is 0.8m high above the ground and at least away from other Metallic surface 0.4m. The EUT is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohms coupling impedance for the testing equipment; and the peripheral equipment powers form other L.I.S.N. Please refer to the block diagram of the test setup and photographs. Both sides of AC line (Line & Neutral) are checked for maximum conducted interference. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables must be changed according to FCC part 15 B.

The frequency range from 150 KHz to 30 MHz is investigated.

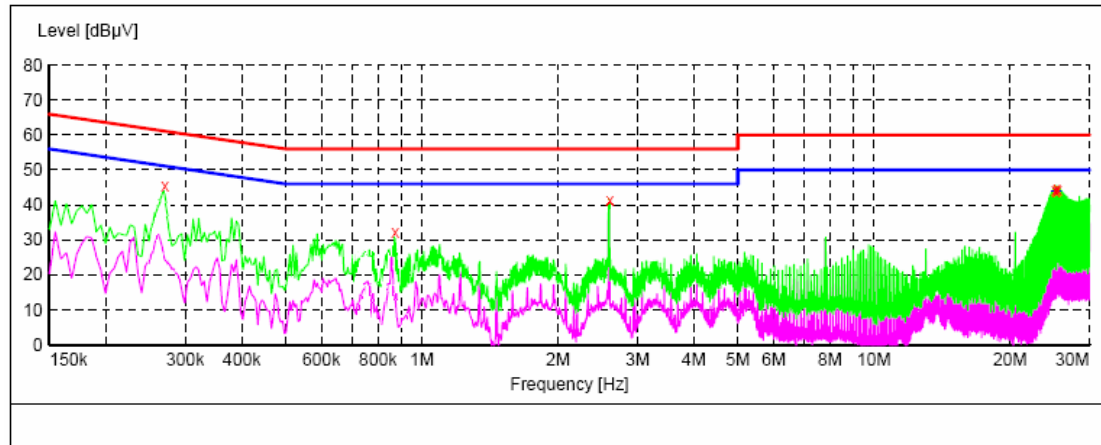
### 2.4. Test Result

**PASS**

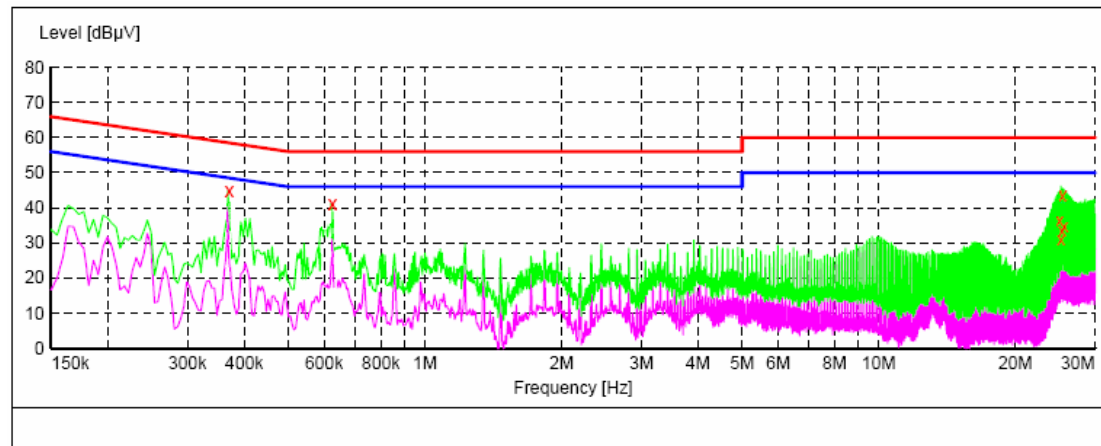
Detailed information, Please refer to the following page.

**Connect to computer for charging:**

**Line:**



**Neutral:**



### 3. RADIATED EMISSION TEST

#### 3.1. Rules Part No.

15.109

#### 3.2. Limits

Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency of (MHz)	Emission Field Strength (microvolts/meter)
30 - 88	100 (40)
88 - 216	150 (43.5)
216 - 960	200 (46.0)
Above 960	500 (54.0)

#### 3.3. Test Procedure

##### **ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES:**

The EUT is placed on a turned table that is 0.8 meter above the ground. The turned table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna that is mounted on the antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (log periodical antenna and horn antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz.

The spectrum was scanned from 30 MHz to 10th harmonic of the fundamental.

#### 3.4. Test Result

**PASS**



**Connect to computer for charging:**

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
47.46	23.20	20.18	40.0	-19.82
55.22	22.60	22.00	40.0	-18.00
97.90	25.10	23.50	43.5	-20.00
291.90	26.80	22.10	46.0	-23.90
551.86	31.00	28.10	46.0	-17.90
891.36	37.60	34.50	46.0	-11.50

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
47.46	27.20	23.60	40.0	-16.40
55.22	22.50	19.50	40.0	-20.50
107.60	24.60	20.80	43.5	-22.70
307.42	26.70	24.00	46.0	-22.00
555.74	30.70	27.20	46.0	-18.80
850.62	36.50	33.00	46.0	-13.00

## 4. PHOTOGRAPH OF TEST

### 4.1.Photo of Power Line Conducted Emission Test



### 4.2.Photo of Radiated Emission Test

