NS Technology Co., Ltd.

Applicant: **Address:**	Dantax radio A/S Bransagervej 15,9490 Pandrup,Denmark		
Manufacturer: **Address:**	Dantax radio A/S Bransagervej 15,9490 Pandrup,Denmark		
E.U.T:	FM/Internet Radio		
Model Number:	R4		
Trade Name:	Scansonic	**Operating Frequency:**	IEEE802.11b 2412~2462MHz IEEE802.11g 2412~2462MHz
Date of Receipt:	Jan.10, 2010	**Date of Test:**	Jan. 12~Jan . 27, 2010
Test Specification:	47 CFR FCC Part 2 Subpart J, section 2.1091		
Test Result:	The equipment under test was found to be compliance with the requirements of the standards applied. **Issue Date: Jan.28, 2010**		

Tested by:	Reviewed by:	Approved by:
Jade	Iceman	Steven
Jade/ Engineer	Iceman Hu / Supervisor	Steven Lee / Manager

Other Aspects:

None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

Maximum Permissible Exposure

1 Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density(S) (mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100000			5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density(S) (mW/cm2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100000			1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

2 MPE Calculation Method

$E (V/m) = (30*P*G)^{0.5}/d$ Power Density: $Pd (W/m^2) = E^2/377$

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$Pd = (30*P*G) / (377*d^2)$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

3 Calculated Result and Limit

Mode	CH	Output power (dBm)	Output power (mW)	Antenna Gain (dBi)	MPE estimation result (mW/cm²) at 20cm	Limit of MPE Estimation (mW/cm²)	Test result
IEEE 802.11b	CH1:2412MHz	16.72	46.99	0.5	0.0104	1	Compiles
	CH6:2437MHz	16.68	46.56	0.5	0.0103	1	Compiles
	CH11:2462MHz	16.94	49.43	0.5	0.0110	1	Compiles
IEEE 802.11g	CH1:2412MHz	16.79	47.75	0.5	0.0106	1	Compiles
	CH6:2437MHz	16.84	48.31	0.5	0.0107	1	Compiles
	CH11:2462MHz	17.21	52.60	0.5	0.0117	1	Compiles