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FCC PART 15

SCANNING RECEIVER

Applicant	KiMARK INTERNATIONAL INC.
Address	1326 CRESTVIEW DRIVE
	SHELBY, NC 28150
FCC ID:	TQX-XSCAN440II
Model Number	TRACK SCANNER 440 II
Product Description	SCANNING RECEIVER
Date Sample Received	DECEMBER 18, 2006
Date Tested	JANUARY 9, 2007
Tested By	JOSEPH SCOGLO
Approved By	MARIO DE ARANZETA
Report Number	3411UT6TestReport.doc
Total Pages	9
Test Results	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**



Certificate # 0955-01

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APPLICANT: KiMARK INTERNATIONAL INC.

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STATEMENT OF COMPLIANCE

This equipment has been tested in accordance with the standards identified in the referenced test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report and demonstrate that the equipment complies with the appropriate standards.

I attest that the necessary measurements were made by me or under my supervision, at TIMCO ENGINEERING, INC. located at 849 N.W. State Road 45, Newberry, Florida 32669 USA.



Certificate #0955-01

Authorized by: Mario de Aranzeta

Authorized Signature: *<Mario de Aranzeta>*

Function: Engineer

Date: 1/2/2007

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GENERAL INFORMATION

The test results relate only to the items tested.	
DUT Description	SCANNING RECEIVER
Model Number	TRACK SCANNER 440 II
DUT Power Source	<input type="checkbox"/> 110-120Vac/50- 60Hz <input type="checkbox"/> DC Power <input checked="" type="checkbox"/> Battery Operated Exclusively
Test Item	<input type="checkbox"/> Prototype <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Production
Modifications to DUT	None
Test Standards	FCC Part 15, Subpart B, ANSI C63.4-2003

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TEST EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3/10-Meter OATS	TEI	N/A	N/A	Listed 3/27/04	3/26/07
3-Meter OATS	TEI	N/A	N/A	Listed 1/11/06	1/10/09
Antenna: Biconnical	Eaton	94455-1	1057	CAL 12/12/05	12/12/07
Antenna: Biconnical	Eaton	94455-1	1096	CAL 10/11/06	10/11/08
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	CAL 4/29/05	4/29/07
Analyzer Blue Tower Quasi-Peak Adapter	HP	85650A	2811A01279	CAL 4/13/05	4/13/07
Analyzer Blue Tower RF Preselector	HP	85685A	2926A00983	CAL 9/5/05	9/5/07
Analyzer Blue Tower Spectrum Analyzer	HP	8568B	2928A04729 2848A18049	CAL 4/13/05	4/13/07
LISN	Electro-Metrics	ANS-25/2	2604	CAL 10/5/06	10/5/08
LISN	Electro-Metrics	EM-7820	2682	CAL 4/28/05	4/28/07
Antenna: Log- Periodic	Eaton	96005	1243	CAL 12/14/05	12/14/07

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TEST PROCEDURE

General: This report shall NOT be reproduced except in full without the written approval of TIMCO ENGINEERING, INC.

Radiation Interference: The test procedure used was ANSI Standard C63.4-2003 using a spectrum analyzer with a pre-selector. The bandwidth of the spectrum analyzer was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The video bandwidth was always greater than or equal to the RBW.

Formula Of Conversion Factors: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the Preselector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz)	Meter Reading	+ ACF	+CL	= FS
33	20 dBuV	+ 10.36 dB/m	+0.40 dB	=30.36 dBuV/m @ 3m

ANSI C63.4-2003 Section 10.1.7 Measurement Procedures: The unit under test was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

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RADIATED SPURIOUS EMISSIONS

Rules Part No.: 15.109

Requirements:

Frequency	Limits
30 – 88	40.0 dB μ V/m measured @ 3 meters
80 – 216	43.5 dB μ V/m measured @ 3 meters
216 – 960	46.0 dB μ V/m measured @ 3 meters
Above 960	54.0 dB μ V/m measured @ 3 meters

Test Procedure: The procedure used was ANSI C63.4-2003. The frequency was scanned from 30 MHz to 1.0 GHz. When an emission was found, the table was rotated to produce the maximum signal strength. The DUT was measured in three (3) orthogonal planes.

Test Data:

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dB μ V	Ant. Pol	Coax Loss dB	Correction Factor dB	Field Strength dB μ V/m	Margin dB
450.0	428.60	19.2	V	3.41	16.69	39.30	6.70
450.0	428.60	19.6	H	3.41	17.00	40.01	5.99
450.0	857.20	12.3	V	4.91	21.94	39.15	6.85
450.0	857.20	17.0	H	4.91	22.70	44.61	1.39
450.0	1,285.80	18.1	V	1.99	28.00	48.09	5.91
450.0	1,714.40	16.9	V	2.54	29.54	48.98	5.02
460.1	438.70	13.7	H	3.45	17.62	34.77	11.23
460.1	438.70	20.3	V	3.45	17.15	40.90	5.10
460.1	877.40	17.1	H	4.95	23.12	45.17	0.83
460.1	877.40	17.9	V	4.95	22.25	45.10	0.90
460.1	1,316.10	18.2	V	2.02	28.00	48.22	5.78
460.1	1,754.80	17.0	V	2.61	29.83	49.44	4.56
469.9	448.60	13.8	H	3.49	17.44	34.73	11.27
469.9	448.60	22.1	V	3.49	16.94	42.53	3.47
469.9	897.20	17.2	H	4.99	23.13	45.32	0.68
469.9	897.20	18.1	V	4.99	22.50	45.59	0.41
469.9	1,345.80	17.4	V	2.05	28.00	47.45	6.55
469.9	1,794.40	18.0	V	2.67	30.12	50.79	3.21

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POWER LINE CONDUCTED INTERFERENCE**Rules Part No.:** Part 15.107**Requirements:**

Frequency (MHz)	Quasi Peak Limits (dBuV)	Average Limits (dBuV)
0.15 – 0.5	66 – 56	56 – 46
0.5 – 5.0	56	46
5.0 – 30	60	50

Test Procedure: ANSI Standard C63.4-2003. The spectrum was scanned from 0.15 to 30 MHz.**Test Data:** Not applicable.

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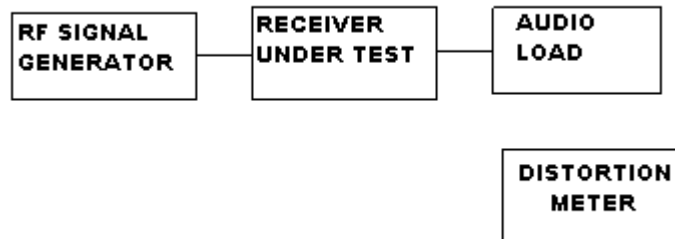
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38 Db REJECTION RADIO

RULES PART NUMBER: 15.121(b)

REQUIREMENTS: 38dB REJECTION RATIO TO SENSITIVITY OF THE RECEIVER.

TEST SET-UP



- a. Equipment connected as illustrated
- b. A standard signal was applied to the receiver input terminals.
- c. Receiver output audio output was adjusted for rated output.
- d. The RF Signal generator was adjusted to the lowest level to produce a 12dB SINAD without the audio output dropping more than 3dB. Make note of sensitivity level.
- e. This was done across the different bands to establish a reference level. The reference taken was the worse case sensitivity.
- f. The output of the signal generator was then adjusted to a level of 60dB above the reference level at a frequency of 824.5MHz.
- g. With the level set 60dB above the level measured in step e.
- h. Set squelch on receiver to threshold, the signal level required to open the squelch must be lower than the level measured in step d.
- i. Cause the receiver to scan or step-it through its complete range of frequencies.
- j. If receiver stops or unsquelches on any frequency, record the frequency and then adjust the level until a 12dB SINAD is produced. This level must be greater than 38dB above the level in step e.
- k. Repeat steps f through j for frequencies 836.0, 848.5, 869.1, 881.0, & 893.5MHz.

TEST RESULTS: The UUT meets the 38dB REJECTION RATIO.

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