



849 NW STATE ROAD 45
NEWBERRY, FL 32669 USA
PH: 888.472.2424 OR 352.472.5500
FAX: 352.472.2030
EMAIL: INFO@TIMCOENGR.COM
[HTTP://WWW.TIMCOENGR.COM](http://WWW.TIMCOENGR.COM)

FCC PART 80 CLASS II PERMISSIVE CHANGE TEST REPORT

APPLICANT	VERTEX STANDARD CO., LTD.
	4-8-8 NAKAMEGURO, MEGURO-KU TOKYO 153-8644 JAPAN
FCC ID	K6630323X30
IC CEERTIFICATION	511B-30323X30
MODEL NUMBER	HX750S, HX760S
PRODUCT DESCRIPTION	HANDHELD MARINE TRANSCEIVER
DATE SAMPLE RECEIVED	2/13/2008
DATE TESTED	2/29/2008
TESTED BY	JOSEPH SCOGLIO
APPROVED BY	MARIO DE ARANZETA
TIMCO REPORT NO.	319AUT8TestReport.doc
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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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

The test results relate only to the items tested.

A bluetooth module has been added to the PCB of the originally approved device; we have performed the intermods testing and there is no degradation in the test results and no additional spurious emissions were found. With the bluetooth module added, the model number HX750S becomes model number HX760S.

Summary

The device under test does:

- fulfill the general approval requirements as identified in this test report
- not fulfill the general approval requirements as identified in this test report

Attestations

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

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.



Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, Fl 32669



Authorized Signatory Name:

Mario de Aranzeta C.E.T.
Compliance Engineer/ Lab. Supervisor

Date: 2/29/2008

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TEST PROCEDURES

Power Line Conducted Interference: The procedure used was ANSI/TIA 603-C:2004 using a 50uH LISN. Both lines were observed with the DUT transmitting. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

Bandwidth 20 dB: The measurements were made with the spectrum analyzer's resolution bandwidth (RBW) = 1 MHz and the video bandwidth (VBW) = 3 MHz and the span set as shown on plot.

Power Output: The RF power output was measured at the antenna feed point using a peak power meter.

Antenna Conducted Emissions: The RBW = 100 kHz, VBW = 300 kHz and the span set to 10.0 MHz and the spectrum was scanned from 30 MHz to the 10th harmonic of the fundamental. Above 1 GHz the resolution bandwidth was 1 MHz and the VBW = 3 MHz and the span to 50 MHz.

Radiation Interference: The test procedure used was ANSI C63.4-2004 using an Agilent spectrum receiver with pre-selector. The bandwidth (RBW) of the spectrum receiver was 100 kHz up to 1 GHz and 1 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1 GHz was 3 MHz. The analyzer was calibrated in dB above a micro volt at the output of the antenna.

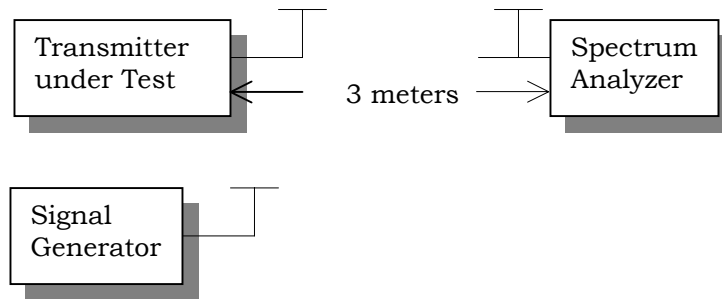
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FIELD STRENGTH OF SPURIOUS EMISSIONS

Rule Parts. No.: FCC Part 2.1053

METHOD OF MEASUREMENT: The tabulated data shows the results of the radiated field strength emissions test. The spectrum was scanned from 30 MHz to at least the tenth harmonic of the fundamental. This test was conducted per ANSI/TIA 603-C:2004 using the substitution method. Measurements were made at the test site of TIMCO ENGINEERING, INC. located at 849 NW State Road 45, Newberry, FL 32669.

Test Setup Diagram:



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Test Data:

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m
157.4	162.6	6.2	V	0.75	15.11	22.06
	171	3.7	H	0.78	15.14	19.62
	171	12.4	V	0.78	16.22	29.4
	314.8	41.3	V	1.11	14.91	57.32
	314.8	43.2	H	1.11	15.1	59.41
	472.3	28.9	H	1.27	17.32	47.49
	472.3	30.4	V	1.27	17.15	48.82
	480	7.4	V	1.28	17.3	25.98
	480	10.5	H	1.28	17.7	29.48
	495.9	7	H	1.3	17.74	26.04
	495.9	8.3	V	1.3	17.82	27.42
	511.9	9.6	H	1.34	18.82	29.76
	511.9	11	V	1.34	18.46	30.8
	528	8.4	H	1.38	18.58	28.36
	528	10.2	V	1.38	17.82	29.4
	544	8.1	H	1.43	18.42	27.95
	544	10.1	V	1.43	18.1	29.63
	629.6	7	H	1.63	19.6	28.23
	629.6	8.1	V	1.63	19.3	29.03
	994.5	7.4	V	2.09	23.25	32.74
	994.5	10.5	H	2.09	24.14	36.73
	1,620.00	19.4	V	2.6	28.77	50.77
	1,620.00	19.8	H	2.6	28.77	51.17
	2,440.00	53.4	V	3.21	32.34	88.95
	2,440.00	57.3	H	3.21	32.34	92.85
	4,880.00	11.9	V	4.94	34.1	50.94
	4,880.00	13.6	H	4.94	34.1	52.64

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EMC EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3-Meter Semi-Anechoic Chamber	Panashield	N/A	N/A	Listed 5/11/07	5/10/10
3-Meter OATS	TEI	N/A	N/A	Listed 1/11/06	1/10/09
3-10 Meter OATS	TEI	N/A	N/A	Listed 3/20/07	3/19/10
Analyzer Tan Tower Spectrum Analyzer	HP	8566B Opt 462	3138A07786 3144A20661	CAL 11/30/07	11/30/09
Analyzer Tan Tower RF Preselector	HP	85685A	3221A01400	CAL 11/30/07	11/30/09
Analyzer Tan Tower Quasi-Peak Adapter	HP	85650A	3303A01690	CAL 11/30/07	11/30/09
Analyzer Tan Tower Preamplifier	HP	8449B-H02	3008A00372	CAL 11/30/07	11/30/09
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	CAL 7/18/07	7/18/09
Antenna: Log-Periodic	Electro-Metrics	LPA-25	1122	CAL 12/1/06	12/1/08
Antenna: Double-Ridged Horn	Electro-Metrics	RGA-180	2319	CAL 7/18/07	7/18/09
LISN	Electro-Metrics	ANS-25/2	2604	CAL 10/5/06	10/5/08
Termaline Wattmeter	Bird Electronic Corporation	611	16405	CAL 3/15/07	3/15/09

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RADIATED TEST SET UP PHOTO

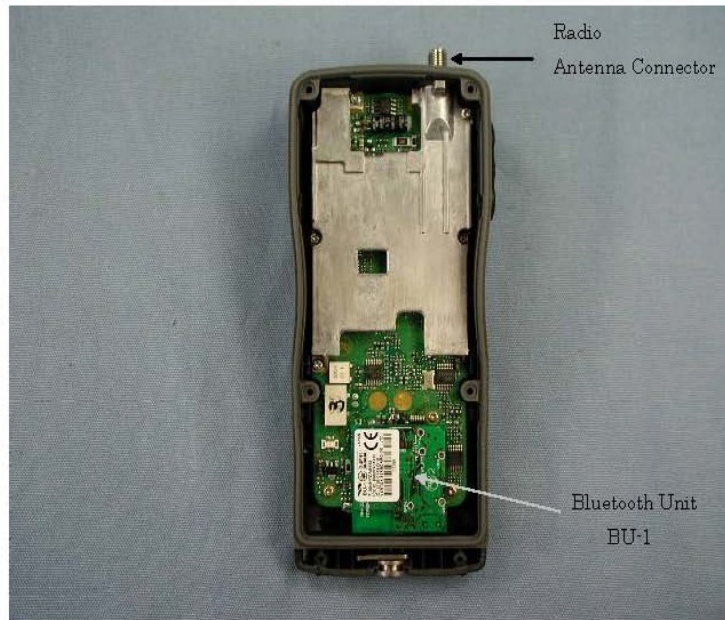


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INTERNAL PHOTOS

(HX760S)

Removed Rear Panel with BU-1



(HX760S)

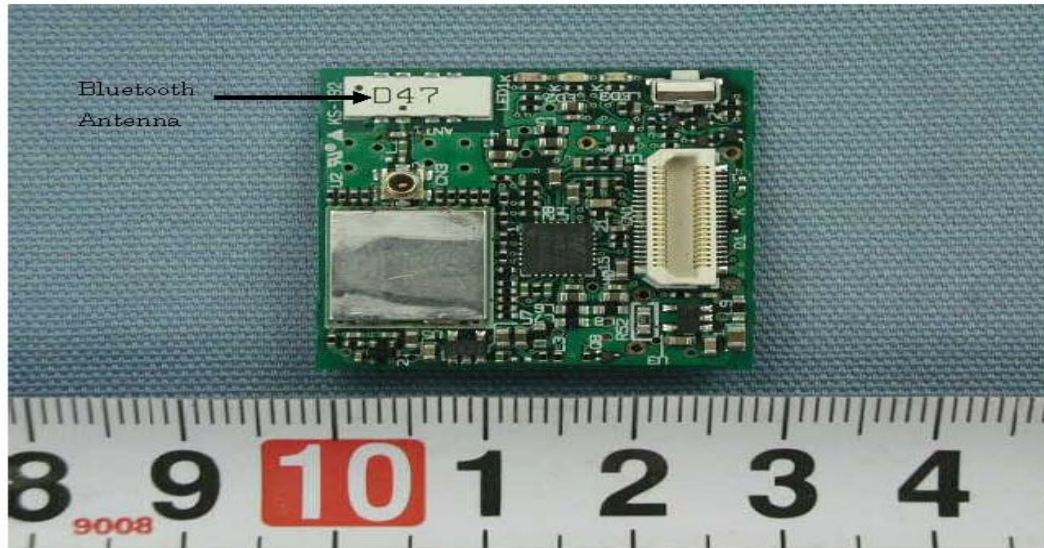
Removed Rear Panel without BU-1



Vertex Standard Co., Ltd.

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TOP View of BU-1



Bottom View of BU-1

