

Marstech Limited

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Authorized by:
Professional Engineers
Ontario


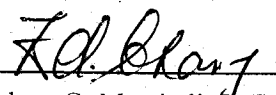
Engineering &
Administrative



Testing For FCC
Submissions/Verifications

Industry Canada
Approved Test Facility



TEST REPORT			
REPORT DATE:		05 March 2004	
REPORT NO:		24028D	
CONTENTS:	See Table of Contents		
SUBMITTOR:	ATLINKS USA, Inc. 101 West 103 rd Street Indianapolis, IN 46290-1102 USA		
SUBJECT:	Model No:	26998XXX-D [Model 26998XXX-D is the same as previously registered Model 26928XXX-D except for the following: (1) RF module layout changed; (2) different base antenna; (3) different TAD circuitry; and (4) handset and base pcb layout changed]	
	FCC ID:	G9H2-6928D	
TEST SPECIFICATION	CFR 47 FCC Part 15 Class "II" Permissive Change NOTE: Tests Conducted Are "Type" Tests..		
DATE SAMPLE RECEIVED:	09 February 2004	DATE TESTED:	13 & 20 February 2004; and 03 March 2004
RESULTS:	Equipment tested complies with referenced specification.		
ALTERATIONS	None		
Tested by:		Approved by:	 Robert G. Marshall, N. Eng.
	Edward Chang	Date:	15 March 2004
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MARSTECH LIMITED

TECHNICAL REPORT - FCC 2.1033(b)

Applicant

ATLINKS USA, Inc.
101 West 103rd Street
Indianapolis, IN
46290-1102 USA

FCC Identifier

G9H2-6928D

Manufacturer

Huiyang CCT Telecommunications Products Co. Ltd.
CCT Technology Park, San He Economic Experimental Zone
Huiyang City, Guangdong Province
P. R. of China

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EXHIBIT D

[FCC Ref. 2.1033(b)(6)]

"Report of Measurements"

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TEST REPORT CONTAINING:

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PRODUCT DESCRIPTION

The Model 26998XXX-D, a single-line cordless telephone with caller ID and answering machine that operates from 902 MHz to 928 MHz, is the same as previously registered Model 26928XXX-D except for the following:

1. RF module layout changed
2. Different base antenna
3. Different TAD circuitry
4. Handset and base pcb layout changed

The antenna used for the base and the handset is permanently attached to the EUT.

Refer to Exhibit D(6) for complete frequency list.

15.249 (a), (b) and (c) FIELD STRENGTH OF EMISSIONS**Requirements:**

Fundamental Frequency	Field Strength of Harmonics	15.209	
902-928 MHz 94dB μ V	54 dB μ V/m@ 3m	30-88 MHz	40 dB μ V/m@ 3m
		88-216 MHz	43.5
		216-960 MHz	46
		Above 960 MHz	54

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in 15.209, whichever is the lesser attenuation.

Emissions that fall in the restricted bands (15.205) must be less than 54dB μ V/m

Procedure

The test procedure used was ANSI STANDARD C63.4-1992 and DA-00-705 using an appropriate spectrum analyzer, as listed in the Test Equipment List. The bandwidth (RBW) of the spectrum analyzer was 100KHz/120KHz up to 1GHz with an appropriate sweep speed. The RBW above 1.0GHz was = 1.0MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the EUT was 24°C with a humidity of 60%.

Test Data:

Refer to Exhibit D(3)-2 and -3

FIELD STRENGTH OF EMISSIONS**BASE UNIT**

Emission Frequency MHz	Meter Reading @3m dBμV	Antenna	Cable and ACF dB	Field Strength dBμV/M	FCC Limit dBμV/M	Margin dB	Detector & BW KHz
<u>Channel 1</u>							
902.125	48.00	RT4 V	33.30	81.30	94	-12.70	PK 100
1353.187	16.00	LP V	36.36	52.36	54	-1.64	PK 1000
1804.250	15.00	Horn V	33.18	48.18	54	-5.82	PK 1000
<u>Channel 40</u>							
904.050	49.00	RT4 V	33.30	82.30	94	-11.70	PK 100
1356.075	15.00	LP V	36.37	51.37	54	-2.63	PK 1000
1808.100	14.00	Horn V	33.18	47.18	54	-6.82	PK 1000
BASE UNIT 30 MHz to 1 GHz							
<u>TX</u>							
451.10	11.23	Bilog V	19.10	30.33	46	-15.67	QP 120
468.30	12.00	Bilog V	19.59	31.59	46	-14.41	QP 120

FIELD STRENGTH OF EMISSIONS**HANDSET UNIT (Headset)**

Emission Frequency MHz	Meter Reading @3m dBμV	Antenna	Cable and ACF dB	Field Strength dBμV/M	FCC Limit dBμV/M	Margin dB	Detector & BW KHz
<u>Channel 1</u>							
925.905	50.00	RT4 V	33.40	83.40	94	-10.60	PK 100
1851.810	15.00	Horn V	33.06	48.06	54	-5.94	PK 1000
2777.715	13.00	Horn H	34.08	47.08	54	-6.92	PK 1000
<u>Channel 40</u>							
927.865	51.00	RT4 V	33.40	84.40	94	-9.60	PK 100
1855.736	14.00	Horn V	33.06	47.06	54	-6.94	PK 1000
2783.604	14.00	Horn H	34.08	48.08	54	-5.92	PK 1000
HANDSET UNIT (Headset) 30 MHz to 1GHz							
<u>TX</u>							
445.70	19.50	Bilog V	19.03	38.53	46	-7.47	QP 120
462.90	19.50	Bilog V	19.48	38.98	46	-7.02	QP 120

TEST FACILITY AND EQUIPMENT LIST

FACILITIES

Radiated ANSI C63.4 (FCC OET/55) open field 3 metre test range. This test range is protected from the cold and moisture by a non-conductive enclosure.

EQUIPMENT

A.H. Systems biconical antenna; 20 MHz to 330 MHz
A.H. Systems log periodic antenna; 300 MHz to 1.8 GHz
Compliance Design P950 Preamp (16 dB) ... 25 MHz to 1.0 GHz

ADDITIONAL TEST EQUIPMENT LIST - CSA

1. Spectrum Analyzer: Advantest R3271A, S/N J001279, Calibration due May 2004
2. Bilog Antenna: Chase CBL6121A, S/N 1039, Calibrated July 2003

ADDITIONAL TEST EQUIPMENT LIST

1. Spectrum Analyzer: ANRITSU 2601A, S/N MT64544, (10KHz - 2.2GHz), Calibrated May 2003
2. Spectrum Analyzer: IFR AN940, S/N 635001039, (9KHz - 26.5GHz), Calibrated March 2003
3. Preamp: HP 8449B, S/N 3008A00378, (1 - 26.5GHz), Calibrated August 2003
4. Horn Antenna: Q-PAR 6878/24, S/N 1721, (1.5-18GHz)
5. Horn Antenna: A. H. Systems SAS 572, S/N 164 (18 - 26.5GHz)
6. Line Impedance Stabilization Network.: Marstech, Cal. July 2003

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

August 22, 2003

Registration Number: 90578

Electrohome Electronics Ltd.
809 Wellington St. N.
Kitchener, Ontario, N2G 4J6
Canada
Attention: Tuat Huynh

Re: Measurement facility located at Roseville
3 meter site
Date of Renewal: August 22, 2003

Dear Sir or Madam:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,



Ms. Phyllis Parrish
Information Technician

FCC ID: G9H2-6928D
Marstech Report No. 24028D
EXHIBIT D(5)

26998D Frequency Table

Handset Frequency Table			
Channel	Tx Freq. (MHz)	Rx Freq. (MHz)	LO Freq. (MHz)
1	925.90	902.10	891.40
2	925.95	902.15	891.45
3	926.00	902.20	891.50
4	926.05	902.25	891.55
5	926.10	902.30	891.60
6	926.15	902.35	891.65
7	926.20	902.40	891.70
8	926.25	902.45	891.75
9	926.30	902.50	891.80
10	926.35	902.55	891.85
11	926.40	902.60	891.90
12	926.45	902.65	891.95
13	926.50	902.70	892.00
14	926.55	902.75	892.05
15	926.60	902.80	892.10
16	926.65	902.85	892.15
17	926.70	902.90	892.20
18	926.75	902.95	892.25
19	926.80	903.00	892.30
20	926.85	903.05	892.35
21	926.90	903.10	892.40
22	926.95	903.15	892.45
23	927.00	903.20	892.50
24	927.05	903.25	892.55
25	927.10	903.30	892.60
26	927.15	903.35	892.65
27	927.20	903.40	892.70
28	927.25	903.45	892.75
29	927.30	903.50	892.80
30	927.35	903.55	892.85
31	927.40	903.60	892.90
32	927.45	903.65	892.95
33	927.50	903.70	893.00
34	927.55	903.75	893.05
35	927.60	903.80	893.10
36	927.65	903.85	893.15
37	927.70	903.90	893.20
38	927.75	903.95	893.25
39	927.80	904.00	893.30
40	927.85	904.05	893.35

Base Unit Frequency Table			
Channel	Tx Freq. (MHz)	Rx Freq. (MHz)	LO Freq. (MHz)
1	902.10	925.90	936.60
2	902.15	925.95	936.65
3	902.20	926.00	936.70
4	902.25	926.05	936.75
5	902.30	926.10	936.80
6	902.35	926.15	936.85
7	902.40	926.20	936.90
8	902.45	926.25	936.95
9	902.50	926.30	937.00
10	902.55	926.35	937.05
11	902.60	926.40	937.10
12	902.65	926.45	937.15
13	902.70	926.50	937.20
14	902.75	926.55	937.25
15	902.80	926.60	937.30
16	902.85	926.65	937.35
17	902.90	926.70	937.40
18	902.95	926.75	937.45
19	903.00	926.80	937.50
20	903.05	926.85	937.55
21	903.10	926.90	937.60
22	903.15	926.95	937.65
23	903.20	927.00	937.70
24	903.25	927.05	937.75
25	903.30	927.10	937.80
26	903.35	927.15	937.85
27	903.40	927.20	937.90
28	903.45	927.25	937.95
29	903.50	927.30	938.00
30	903.55	927.35	938.05
31	903.60	927.40	938.10
32	903.65	927.45	938.15
33	903.70	927.50	938.20
34	903.75	927.55	938.25
35	903.80	927.60	938.30
36	903.85	927.65	938.35
37	903.90	927.70	938.40
38	903.95	927.75	938.45
39	904.00	927.80	938.50
40	904.05	927.85	938.55