

EXHIBIT B

Measurement Report

MEASUREMENT REPORT of CORDLESS TELEPHONE

Applicant : Teledex Corporation
Model No. : TC315A, TC315B, TC315T, TC316A, TC316B, TC316T
EUT : Two Line 900 MHz Analog Cordless Phone with CID
FCC ID : DXA-TR2C
Report No. : S2115207

Test by :

Training Research Co., Ltd.

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2, Lane 194, Huan-Ho Street, Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

CERTIFICATION

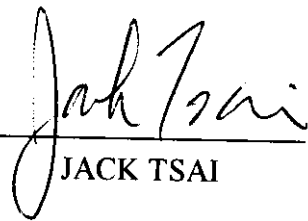
We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made mainly in accordance with the procedures given in ANSI C63.4 (1992) as a reference. All test were conducted by *Training Research Co., Ltd.*, 2, Lane 194, Huan-Ho Street, Hsichi, Taipei Hsien 221, Taiwan, R.O.C. Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is in compliance with the technical requirements set forth in the FCC Rules Part 15 Subpart C Section 15.249.

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EUT : Two Line 900 MHz Analog Cordless Phone with CID
FCC ID : DXA-TR2C
Report No. : S2115207
Test Date : MAY 20, 1999

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I. GENERAL

1.1 Introduction

The following measurement report is submitted on behalf of Applicant in support of a Cordless Telephone certification in accordance with Part 2 Subpart J and Part 15 Subpart A and C of the Commission's Rules and Regulations.

1.2 Description of EUT

EUT : Two Line 900 MHz Analog Cordless Phone with CID/CW
Model No. : TC315A, TC315B, TC315T, TC316A, TC316B, TC316T
FCC ID : DXA-TR2C
Frequency Range : Base: 925.08 – 927.36 MHz
Handset: 902.58 – 904.86 MHz
Support Channel : 20 Channel
Power Type : Base Powered by 120 Vac 60 Hz / 9 Vdc 300 mA
Handset powered by 3.6 V / 600 mAh.
Power Cord : Non-shielded
Data Cable : RJ-14 x 3 => Non-shielded, 7' long, Plastic hoods, No bead
Jack of Headset => This port is disable.
Applicant : Teledex Corporation
3914 Murphy Canyon Rd., Suite A-207,
San Diego, CA 92123, USA

1.3 Description of Support Equipment

In order to construct the minimum testing, following equipment were used as the support units.

PABX : King Design
Model No. : KD8705-A
Serial No. : GV101101186
Power type : 110 VAC 50/60Hz
Power cord : Non - Shielded

1.4 Configuration of System Under Test

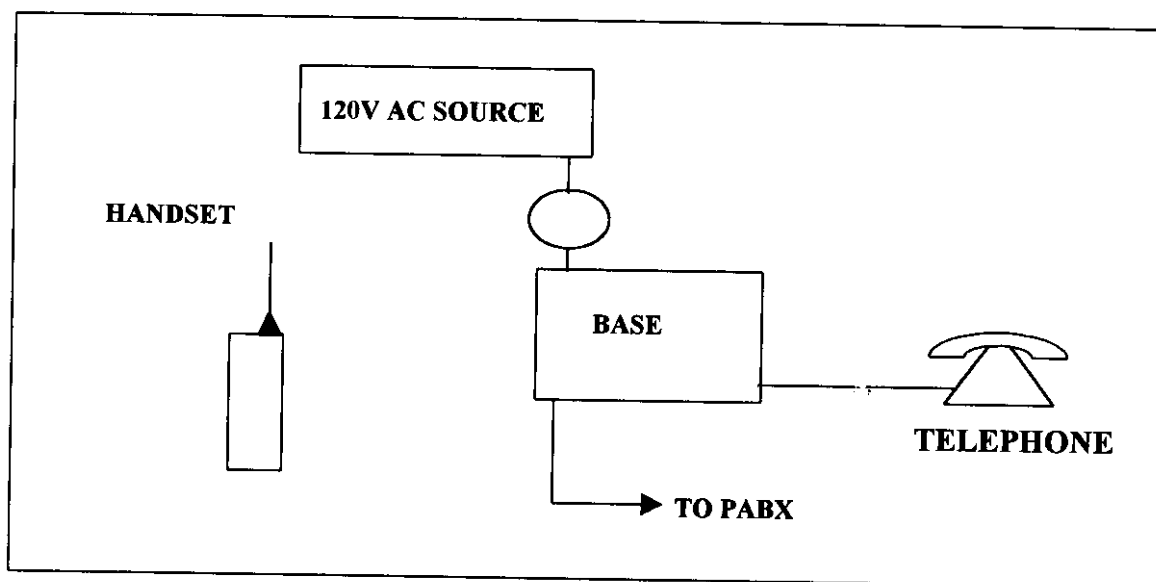


Fig. 1 Configuration of system under test

During testing the EUT was connected to PABX & telephone. A diagram of the complete test configuration was shown in Fig 1.

1.5 Test Procedure

All measurements contained in this report were performed mainly according to the techniques described in Measurement procedure ANSI C63.4 (1992).

1.6 Location of the Test Site

The radiated emissions measurements required by the rules were performed on the **three-meter, Anechoic Chamber (Registration Number: 93906)** maintained by *Training Research Co., Ltd.* 1F., No. 2, Lane 194, Huan-Ho Street, Hsichih, Taipei Hsien 221, Taiwan, R.O.C. Complete description and measurement data have been placed on file with the commission. The conducted power line emissions tests and other test items were performed in a shielded enclosure also located at Training Research Co., Ltd. B1, No. 2, Lane 194, Huan-Ho Street, Hsichih, Taipei Hsien 221, Taiwan, R.O.C. *Training Research Co., Ltd.* is listed by the FCC as a facility available to do measurement work for others on a contract basis.

1.7 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests was chosen as that which produced the highest emission levels. However, only those conditions which the EUT was considered likely to encounter in normal use were investigated.

In test, the base and handset are tested separately. They were set in Ch01, Ch20 of EUT and continuously transmitting mode that controlled by test mode of EUT.

II. Conducted Emissions Measurements

2.1 Test Condition & Setup

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the backwall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3825/2 Line Impedance Stabilization Networks (LISNs). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPER quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 450 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 2.4.

There are tree test condition apply in this test item, the test procedure description as the following:

2.2 List of Test Instruments

Manufacturer	Device	Model	Input impedance
Hewlett Packard	100Hz-1.5GHz Spectrum Analyzer	HP8591EM	50.00
EMCO	Line Impedance Stabilization Network	3825/2	50.00
TRC	Shielded Room	TRC-SR!	N/A

2.4 Test Result of Conducted Emissions

The following table shows a summary of the highest emissions of power line conducted emissions on the HOT and NATURAL conductors of the EUT power cord.

Model No. : TC315A, TC315B, TC315T, TC316A, TC316B, TC316T
EUT : Two Line 900 MHz Analog Cordless Phone with CID

Table 1 Power Line Conducted Emissions (Channel 01)

Power	Connected	Emissions	FCC	Class B
Conductor	Frequency (KHz)	Peak Amplitude (dBuV)	Limit (dBuV)	Margin (dB)
Line 1	461.00	35.69	48.00	-12.31
	473.00	36.00	48.00	-12.00
	486.00	35.26	48.00	-12.74
	502.00	34.54	48.00	-13.46
	534.00	31.89	48.00	-16.11
	556.00	29.96	48.00	-18.04
	575.00	30.04	48.00	-17.96
	586.00	28.66	48.00	-19.34
	628.00	27.16	48.00	-20.84
	671.00	25.41	48.00	-22.59
LINE 2	452.00	37.67	48.00	-10.33
	467.00	37.46	48.00	-10.54
	505.00	35.02	48.00	-12.98
	530.00	33.65	48.00	-14.35
	560.00	30.78	48.00	-17.22
	582.00	29.30	48.00	-18.70
	593.00	28.69	48.00	-19.31
	615.00	28.98	48.00	-19.02
	637.00	27.24	48.00	-20.76
	650.00	27.66	48.00	-20.34

NOTE:

1. Margin = Peak Amplitude - Limit
2. A "+" sign in the margin column means the emission is OVER the Class B Limit and "-" sign of means UNDER the Class B limit.

Table 2 Power Line Conducted Emissions (Channel 20)

Power	Connected	Emissions	FCC	Class B
Conductor	Frequency (KHz)	Peak Amplitude (dBuV)	Limit (dBuV)	Margin (dB)
Line 1	457.00	35.15	48.00	-12.85
	470.00	30.02	48.00	-17.98
	483.00	35.14	48.00	-12.86
	505.00	33.91	48.00	-14.09
	534.00	31.35	48.00	-16.65
	556.00	30.35	48.00	-17.65
	568.00	28.69	48.00	-19.31
	590.00	27.87	48.00	-20.13
	615.00	26.03	48.00	-21.97
	628.00	25.92	48.00	-22.08
LINE 2	452.00	36.82	48.00	-11.18
	467.00	36.58	48.00	-11.42
	496.00	34.43	48.00	-13.57
	518.00	31.99	48.00	-16.01
	534.00	32.12	48.00	-15.88
	549.00	29.84	48.00	-18.16
	593.00	26.89	48.00	-21.11
	615.00	26.93	48.00	-21.07
	633.00	26.29	48.00	-21.71
	654.00	25.38	48.00	-22.62

Table 3 Power Line Conducted Emissions (Charge Mode)

Power	Connected	Emissions	FCC	Class B
Conductor	Frequency (KHz)	Peak Amplitude (dBuV)	Limit (dBuV)	Margin (dB)
Line 1	467.00	37.03	48.00	-10.97
	493.00	35.79	48.00	-12.21
	505.00	35.25	48.00	-12.75
	521.00	33.67	48.00	-14.33
	530.00	33.20	48.00	-14.80
	560.00	30.69	48.00	-17.31
	575.00	29.40	48.00	-18.60
	615.00	28.42	48.00	-19.58
	637.00	27.10	48.00	-20.90
	654.00	25.91	48.00	-22.09
LINE 2	457.00	34.87	48.00	-13.13
	483.00	30.71	48.00	-17.29
	499.00	28.78	48.00	-19.22
	862.00	28.99	48.00	-19.01
	916.00	31.50	48.00	-16.50
	941.00	31.13	48.00	-16.87
	960.00	30.87	48.00	-17.13
	991.00	30.14	48.00	-17.86
	1015.00	29.50	48.00	-18.50
	1055.00	27.92	48.00	-20.08

III. Radiated Emissions Measurements

3.1 Test Condition & Setup

The EUT was placed in a anechoic chamber and scanned at 3 meter distance to determine its emission characteristics. The physical arrangement of the EUT was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude, directivity, and frequency. The exact system configuration which produced the highest emissions was noted so it could be reproduced later during the final tests. This was done to ensure that the final measurements would demonstrate the worst-case interference potential of the EUT.

Final radiation measurements were made on a three-meter, anechoic chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter.

The spectrum was examined from 30 MHz to 1000 MHz using an Hewlett Packard 85460A EMI Receiver, M.E. whole range Bi-Log antenna (Model No.: VULB9160) is used to measure frequency from 30 MHz to 1GHz. The final test is used the spectrum HP 85460A and spectrum was examined from 1 GHz to 18GHz using an Hewlett Packard 8592A Spectrum Analyzer, EMCO Horn Antenna (Model 3115) for 1 G - 18 GHz.

At each frequency, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. There are two spectrum analyzers use on this testing , HP 85460A for frequency 30MHz to 1000MHz, and HP8592A for frequency 1 GHz to 18 GHz. No post-detector video filters were used in the test. The spectrum analyzer's 6 dB bandwidth was set to 120 KHz (spectrum was examined from 30 MHz to 1000 MHz), the spectrum analyzer's 6 dB bandwidth was set to 1 MHz (spectrum was examined from 1 GHz to 18GHz) and the analyzer was operated in the maximum hold mode.

The actual field intensity in decibels referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) at the appropriate frequency.

For frequency between 30MHz to 1000MHz
$$F_{la} \text{ (dBuV/m)} = F_{lr} \text{ (dBuV)} + \text{Correction Factors}$$

F_{la} : Actual Field Intensity

F_{lr} : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss

For frequency between 1GHz to 18GHz
$$F_{la} \text{ (dBuV/m)} = F_{lr} \text{ (dBuV)} + \text{Correction Factor}$$

F_{la} : Actual Field Intensity

F_{lr} : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss – Distance Factor (9.54dB) – Amplifier Gain

3.2 List of Test Instruments

Manufacturer	Device	Model	Input Impedance
Hewlett Packard	.9KHz – 6GHz EMI Receiver	HP85460A	50.00
M.E.	30MHz-1.5GHz Bi-Log Antenna	VULB 9160	50.00
Hewlett Packard	.50KHz – 22GHz Spectrum Analyzer	HP8592A	50.00

3.4 Test Result of Radiated Emissions

The peak values of fundamental emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Model No. : TC315A, TC315B, TC315T, TC316A, TC316B, TC316T
EUT : Two Line 900 MHz Analog Cordless Phone with CID

Table 4 Open Field Fundamental Emissions

Channel	Frequency (MHz)	A.P. (H/V)	A.H. (CM)	Table (degree)	Amplitude (Peak) (dBuV/m)	Limit (dBuV)	Margin (dBuV)
Base 01	925.08	H	100.00	15	79.87	94.00	-14.13
		V	100.00	214	79.48	94.00	-14.52
Base 20	927.36	H	100.00	319	78.77	94.00	-15.23
		V	100.00	28	80.00	94.00	-14.00
Handset 01	902.58	H	100.00	176	73.22	94.00	-20.78
		V	100.00	311	82.07	94.00	-11.93
Handset 20	904.86	H	100.00	85	81.25	94.00	-12.75
		V	100.00	244	87.74	94.00	-6.26

Note:

1. A. P. means antenna polarization, horizontal and vertical.
2. A. H. means antenna height.
3. Table means turntable turning position.
4. Amplitude means the fundamental emission measured.
5. Margin = Amplitude-limit

3.5 Test Result of Spurious Radiated Emissions

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Model No. : TC315A, TC315B, TC315T, TC316A, TC316B, TC316T
EUT : Two Line 900 MHz Analog Cordless Phone with CID

Table 5 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 01, Base Horizontal]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	38.21	1.00	211	-12.93	25.28	40.00	-14.72
223.235	46.01	1.00	175	-12.19	33.82	46.00	-12.18
231.540	47.02	1.00	28	-12.75	34.27	46.00	-11.73
462.835	52.91	2.00	316	-19.95	32.96	46.00	-13.04
694.470	64.48	1.00	286	-24.71	39.77	46.00	-6.23
892.460	67.89	1.00	134	-27.71	40.18	46.00	-5.82

Note:

1. Margin = Corrected - Limit.
2. Peak Amplitude + Correction Factors = Corrected

Table 6 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 01, Base Horizontal]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.157	64.12	100.00	334	-8.67	-9.54	45.91	54	-8.09
1.850	53.16	100.00	335	-8.67	-9.54	34.95	54	-19.05
2.300	53.49	100.00	184	-8.67	-9.54	35.28	54	-18.72
2.770	59.83	100.00	128	-6.84	-9.54	43.45	54	-10.55
3.210	54.30	100.00	204	-5.64	-9.54	39.12	54	-14.88
3.670	52.30	100.00	48	-5.64	-9.54	37.12	54	-16.88

Note:

1. Margin = Corrected - Limit.
2. Peak Amplitude + Correction Factor + Distance = Corrected

Table 7 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 01, Base Vertical]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	43.32	1.00	393	-12.93	30.39	40.00	-9.61
44.822	43.30	1.00	10	-12.60	30.70	40.00	-9.30
45.528	44.15	1.00	301	-12.60	31.55	40.00	-8.45
223.235	42.33	1.00	22	-12.19	30.14	46.00	-15.86
231.540	42.02	1.00	157	-12.75	29.27	46.00	-16.73
462.835	59.71	1.00	298	-19.95	39.76	46.00	-6.24
694.470	60.55	1.00	192	-24.77	35.78	46.00	-10.22
892.460	68.56	1.00	88	-27.71	40.85	46.00	-5.15

Table 8 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 01, Base Vertical]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.157	64.55	100.00	328	-8.67	-9.54	46.34	54	-7.66
1.850	56.66	100.00	129	-8.67	-9.54	38.45	54	-15.55
2.300	54.16	100.00	19	-8.67	-9.54	35.95	54	-18.05
2.770	59.33	100.00	226	-6.84	-9.54	42.95	54	-11.05
2.990	51.66	100.00	178	-6.84	-9.54	35.28	54	-18.72
3.210	50.13	100.00	326	-5.64	-9.54	34.95	54	-19.05
3.670	54.46	100.00	185	-5.64	-9.54	39.28	54	-14.72

Table 9 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 20, Base Horizontal]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	38.46	2.00	133	-12.93	25.53	40.00	-14.47
223.613	47.19	1.00	219	-12.22	34.97	46.00	-11.03
231.540	45.13	1.00	306	-12.75	32.38	46.00	-13.62
462.457	54.87	2.00	27	-19.95	34.92	46.00	-11.08
694.470	64.19	1.00	152	-24.77	39.42	46.00	-6.58
892.460	68.46	1.00	184	-27.71	40.75	46.00	-5.25

Table 10 Open Field Radiated Emissions For 1GHz ~ 18GHz [Channel 20, Base Horizontal]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.157	61.23	100	316	-8.67	-9.54	43.02	54	-10.98
1.855	51.99	100.00	253	-8.67	-9.54	33.78	54	-20.22
2.300	51.16	100.00	158	-8.67	-9.54	32.95	54	-21.05
2.520	50.83	100.00	106	-6.84	-9.54	34.45	54	-19.55
2.770	58.83	100.00	21	-6.84	-9.54	42.45	54	-11.55
2.990	52.00	100.00	357	-6.84	-9.54	35.62	54	-18.38
3.230	55.96	100.00	189	-5.64	-9.54	40.78	54	-13.22
3.480	55.96	100.00	15	-5.64	-9.54	36.78	54	-17.22

Table 11 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 20, Base Vertical]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	43.88	1.00	207	-12.93	30.95	40.00	-9.05
46.032	42.28	1.00	108	-12.62	29.66	40.00	-10.34
223.235	43.62	1.00	167	-12.19	31.43	46.00	-14.57
231.917	43.42	2.00	35	-12.77	30.65	46.00	-15.35
462.457	61.95	1.00	211	-19.95	42.00	46.00	-4.00
694.470	60.11	1.00	244	-24.77	35.34	46.00	-10.66
892.460	68.49	1.00	141	-27.71	40.78	46.00	-5.22

Table 12 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 20, Base Vertical]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.157	64.46	100.00	81	-8.67	-9.54	46.25	54	-7.75
1.855	56.16	100.00	23	-8.67	-9.54	37.95	54	-16.05
2.300	54.83	100.00	168	-8.67	-9.54	36.62	54	-17.38
2.520	50.33	100.00	176	-6.84	-9.54	33.95	54	-20.05
2.770	58.66	100.00	211	-6.84	-9.54	42.28	54	-11.72
2.990	53.33	100.00	57	-6.84	-9.54	36.95	54	-17.05
3.230	53.13	100.00	199	-5.64	-9.54	37.95	54	-16.05
3.480	51.63	100.00	151	-5.64	-9.54	36.45	54	-17.55

Table 13 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 01, Handset Horizontal]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
101.995	37.26	4.00	20	-11.28	25.98	43.50	-17.52
225.877	51.20	2.00	155	-12.38	38.82	46.00	-7.18
226.255	49.20	1.00	169	-12.41	36.79	46.00	-9.21
234.560	41.40	4.00	314	-12.95	28.45	46.00	-17.55
285.522	42.64	2.00	266	-14.89	27.75	46.00	-18.25
451.510	50.24	4.00	189	-19.77	30.47	46.00	-15.53
452.100	50.12	4.00	314	-19.78	30.34	46.00	-15.66
911.555	60.27	1.00	266	-28.03	32.24	46.00	-13.76

Table 14 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 01, Handset Horizontal]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.810	63.57	100.00	189	-8.67	-9.54	45.36	54	-8.64
1.805	56.66	100.00	332	-8.67	-9.54	38.45	54	-15.55
2.020	58.33	100.00	157	-8.67	-9.54	40.12	54	-13.88
2.240	57.33	100.00	48	-8.67	-9.54	39.12	54	-14.88
2.460	55.50	100.00	55	-6.84	-9.54	39.12	54	-14.88
2.680	53.83	100.00	214	-6.84	-9.54	37.45	54	-16.55
2.900	57.00	100.00	94	-6.84	-9.54	40.62	54	-13.38
3.150	53.00	100.00	339	-6.84	-9.54	36.62	54	-17.38
3.370	51.96	100.00	268	-5.64	-9.54	36.78	54	-17.22

Table 15 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 01, Handset Vertical]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	39.85	1.00	141	-12.93	26.92	40.00	-13.08
101.995	39.79	2.00	152	-11.28	28.51	43.50	-14.99
225.877	54.62	1.00	228	-12.38	42.24	46.00	-3.76
234.560	46.31	2.00	317	-12.95	33.36	46.00	-12.64
451.132	60.40	1.00	66	-19.76	40.64	46.00	-5.36
452.100	60.44	1.00	179	-19.78	40.66	46.00	-5.34
677.385	56.74	1.00	341	-24.35	32.39	46.00	-13.61
894.972	65.03	1.00	286	-27.78	37.25	46.00	-8.75
911.555	65.02	1.00	159	-28.03	36.99	46.00	-9.01

Table 16 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 01, Handset Vertical]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.130	57.97	100.00	89	-8.67	-9.54	39.76	54	-14.24
1.805	60.83	100.00	233	-8.67	-9.54	42.62	54	-11.38
2.020	54.33	100.00	59	-8.67	-9.54	36.12	54	-17.88
2.460	53.00	100.00	248	-6.84	-9.54	36.62	54	-17.38
2.680	51.16	100.00	315	-6.84	-9.54	34.78	54	-19.22
2.900	53.83	100.00	124	-6.84	-9.54	37.45	54	-16.55
3.150	54.16	100.00	196	-6.84	-9.54	37.78	54	-16.22
3.370	51.96	100.00	314	-5.64	-9.54	36.78	54	-17.22

Table 17 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 20, Handset Horizontal]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
101.995	28.88	4.00	290	-11.28	17.60	43.50	-25.90
226.632	48.62	1.00	125	-12.43	36.19	46.00	-9.81
234.937	37.58	2.00	67	-12.98	24.60	46.00	-21.40
285.522	41.58	4.00	345	-14.89	26.69	46.00	-19.31
896.982	64.33	1.00	160	-27.82	36.51	46.00	-9.49

Table 18 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 20, Handset Horizontal]

Radiated Emission				Correction Factors (dB)	Distance (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.809	56.16	100.00	114	-8.67	-9.54	37.95	54	-16.05
2.020	55.16	100.00	216	-8.67	-9.54	36.95	54	-17.05
2.240	55.33	100.00	186	-8.67	-9.54	37.12	54	-16.88
2.460	55.50	100.00	235	-6.84	-9.54	39.12	54	-14.88
2.680	53.16	100.00	94	-6.84	-9.54	36.78	54	-17.22
2.930	58.50	100.00	212	-6.84	-9.54	42.12	54	-11.88
3.150	52.33	100.00	134	-6.84	-9.54	35.95	54	-18.05
3.370	51.80	100.00	262	-5.64	-9.54	36.62	54	-17.38

Table 19 Open Field Radiated Emissions for 30MHz ~ 1GHz [Channel 20, Handset Vertical]

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dBuV/m)	FCC Class B (3 M)	
Frequency (MHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)			Limit (dBuV/m)	Margin (dB)
39.983	44.23	1.00	75	-12.93	31.30	40.00	-8.70
101.995	39.88	4.00	213	-11.28	28.60	43.50	-14.90
226.632	54.30	4.00	167	-12.43	41.87	46.00	-4.13
234.937	46.65	4.00	217	-12.98	33.67	46.00	-12.33
452.642	60.41	1.00	81	-19.78	40.63	46.00	-5.37
453.270	60.24	1.00	216	-19.79	40.45	46.00	-5.55
679.395	55.50	1.00	87	-24.40	31.10	46.00	-14.90
897.485	73.12	1.00	117	-27.83	45.29	46.00	-0.71
914.067	62.89	1.00	18	-28.04	34.85	46.00	-11.15

Table 20 Open Field Radiated Emissions for 1GHz ~ 18GHz [Channel 20, Handset Vertical]

Radiated Emission				Correction Factors	Distance	Corrected Amplitude	FCC Class B (3 M)	
Frequency (GHz)	Amplitude (dBuV/m)	Ant.H. (cm)	Table (°)				Limit (dBuV/m)	Margin (dB)
1.809	55.83	100.00	45	-8.67	-9.54	37.62	54	-16.38
2.460	52.66	100.00	217	-6.84	-9.54	36.28	54	-17.72
2.680	53.66	100.00	358	-6.84	-9.54	37.28	54	-16.72
2.930	55.50	100.00	123	-6.84	-9.54	39.12	54	-14.88
3.150	54.50	100.00	87	-6.84	-9.54	38.12	54	-15.88
3.370	53.13	100.00	312	-5.64	-9.54	37.95	54	-16.05

IV. Verify Frequencies and Channels

Table 21 Verify the Frequency Pairs

Channel	Handset (MHz)	Base (MHz)	Channel	Handset (MHz)	Base (MHz)
1	902.58	925.08	11	903.78	926.28
2	902.70	925.20	12	903.90	926.40
3	902.82	925.32	13	904.02	926.52
4	902.94	925.44	14	904.14	926.64
5	903.06	925.56	15	904.26	926.76
6	903.18	925.68	16	904.38	926.88
7	903.30	925.80	17	904.50	927.00
8	903.42	925.92	18	904.62	927.12
9	903.54	926.04	19	904.74	927.24
10	903.66	926.16	20	904.86	927.36

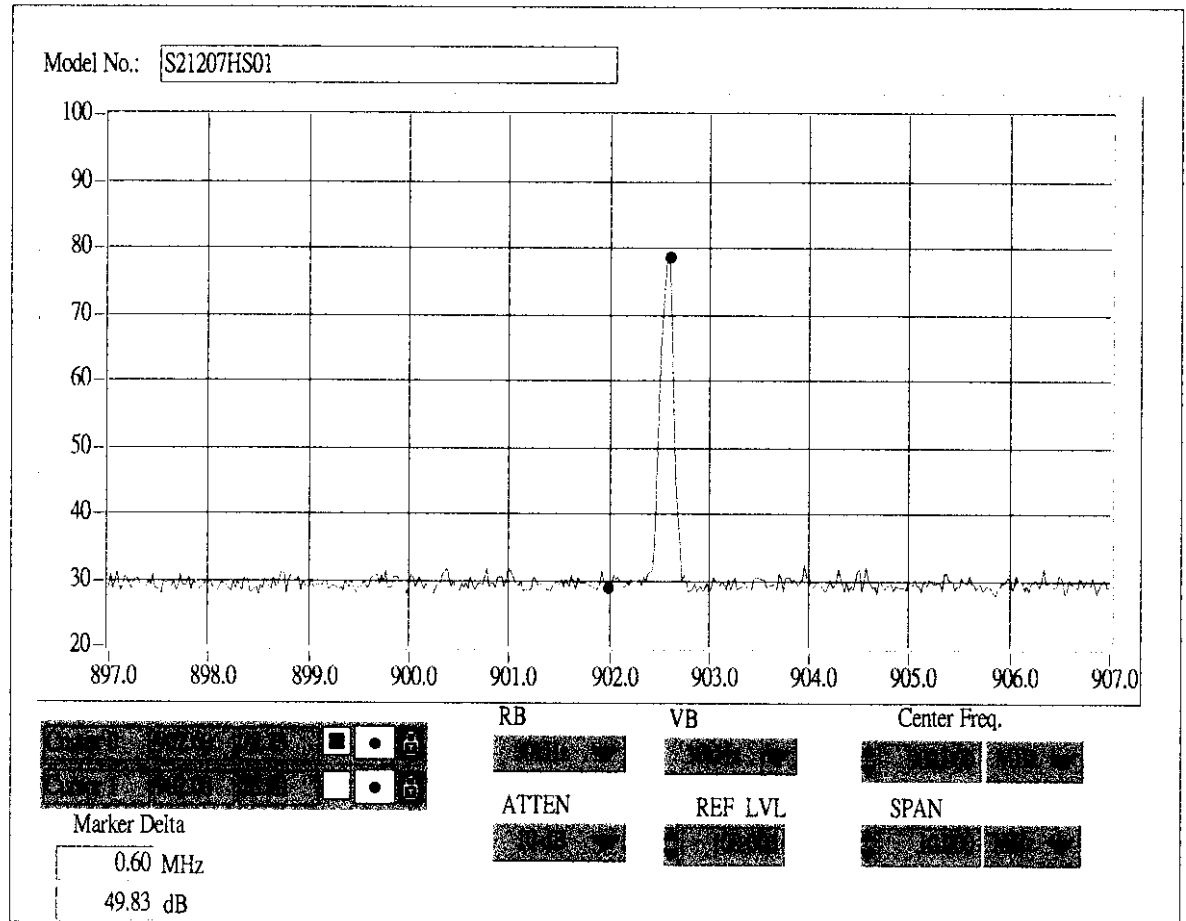
Note: This is for sure that all frequencies are in 902 MHz to 928 MHz.

Section 15.214(d) The security code is set automatic :

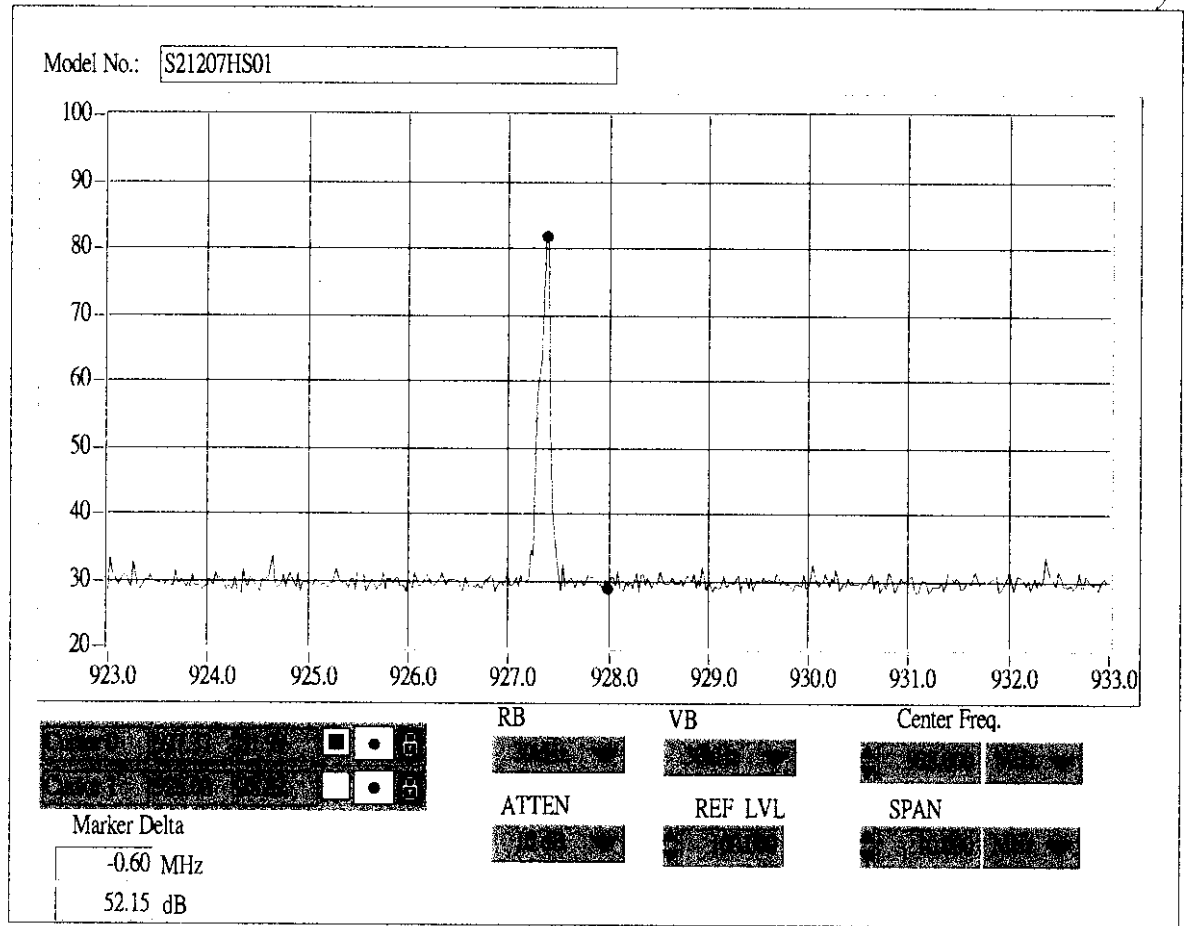
Every time when you place the handset in the base, your cordless will randomly select one of 65,000 possible security codes.

Appendix A

The antenna of the device is screwed inside the device, the user can not remove it freely without any tools from outside the device. This is comply with the FCC rules part 15.203

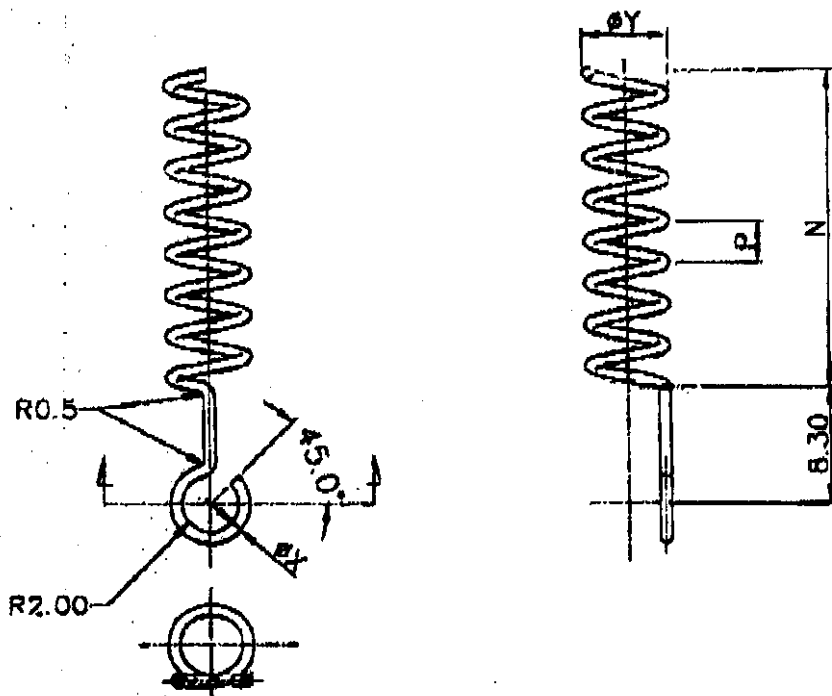


Check frequency at 902-928MHz



Check frequency at 902-928 MHz

REVISIONS			
REV. ITEM	DESCRIPTION	PREPARED	APPROVED
1 0	RELEASED FOR QUOTATION ONLY	Barry CHOW 990514	K M CHAN 990514



SPECIFICATIONS

PITCH (P)	4.0mm
NO. OF TURN (N)	6-3/4
DIAMETER OF WIRE (X)	0.5mm
DIAMETER OF SPRING (Y)	6.0mm

MATERIAL : PRE-NICKEL PLATED MEDIUM CARBON STEEL
(THE MATERIAL SHOULD BE EASY FOR SOLDERING)

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN MM

TOLERANCE ON :
LINEAR : X.X ± 0.1 X.XX ± 0.13
ANGULAR : X, ± 1° X.X ± 0.5°



SCALE
DO NOT SCALE



S. MEGGA
TELECOMMUNICATIONS

TITLE

COIL ANTENNA H/S

DATE NO

7510300110(0200)

REV

DRAWN
Barry Chow 990514

CHECKED
DATE

APPROVED
K M CHAN 990514

USED ON
TELEDEX
TR1C/TR2C
TH2M

REF# HS-COIL

SIZE A4

3/1/97 1

