

NEWCONT

新大陆电子

电气性能测试指标

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Department

适用机型：NTP-6211B

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a	NTP-6211B 无绳电话机电气性能测试指标 NTP-6211B Cordless telephone tested elec. Specs.			
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NTP-6211b

无绳电话机测试方法和指标

(Testing Method and Specification for Cordless Telephone NTP-6211B)

测试条件(Test Condition)

手机电压	DC3. 8±0. 1V
Battery Volt.	
座机电压	DC9V/300mA
Base Power Supply	
环境温度	-10 -- +40℃
Environment Temp.	
湿度	10% -- 95%
Humidity	
环境噪音	低于 60dB(A) SPL (Low then 60dB(A) SPL)
Environment Noise	
Loop Current:	30mA

进入测试模式

Get into Test Mode

1. 紧按座机“PAGE”键，然后接通 9V 直流电源，座机电源接通并进入测试模式。

Press PAGE on Base and hold while connect to 9VDC, then the Base get into Test Mode.

2. 系统进入 CH20，**发射频率 902.600MHz**

The system get into CH20 and transmit in 902.600MHz

3. 循环按“PAGE”键分别进入 CH21, CH22, CH23...CH40, CH1, CH2...CH20。拨动座机“P/T”键“T”档，可关闭接收通路。充电 CPU 会发出 TXDATA。

System get in CH21, CH22, CH23, ...CH40, CH1, CH2...CH20 in sequence once you press Page Button repeatedly. With switching “P/T” to “T”, the receiving connecting will be interrupted. CPU spreads out TXDATA during being charged.

4. RSSI 检测，信号强时 INUSE LED 亮，信号弱时 INUSE LED 灭。

RSSI testing, while signals strong the LED ‘IN USE’ light, otherwise that LED go out.

5. 紧按手机“*”键，然后接通手机 3.8V 电源，手机进入测试模式。手机进入 CH20，**发射频率 926.625MHz**

Press “*” on Handset and hold while handset being connected to 3.8V, the handset gets into Test Mode and CH20

transmitting in frequency 926.625MHz

6. 循环按“*”键，可依次进入 CH21, CH22, CH23...~CH40, CH1, CH2...CH20。

The handset gets into CH21, CH22, CH23...CH40, CH1, CH2...CH20 in sequence while press “*” button repeatly.

7. 循环按“0”键，可依次进入 CH20--CH40--CH1

the handset gets into CH20-CH40-CH1 in sequence while press “0” repeatedly.

8. 按“#”键，可切换 TXDATA OFF/ON。 Pressing “#” you can switch over between TXDATA and OFF/ON

9. RSSI 检测，信号强时 INUSE LED 亮，信号弱时 INUSE LED 灭。

RSSI testing, while signals strong the LED “INUSE” lights, otherwise, INUSE LED goes out.

10. 按 VOL 键可调节音量

If you adjust the level of volume, you just need to press VOL button.

测试指标 SPECIFICATION

测试项目 Item	测试说明 Instructions	测试指标 Specification		单位 Unit
		典型值 Type Value	极限值 Limit	
座 机				
A:发射部分 TRANSMITTING PARTS		频道置 CH20 (set to CH20)		
a. TXVCO		2.0	+/-0.2	(V)
b. RXVCO		2.0	+/-0.2	(V)
c. 发射频率 Trans. Freq.	902.600MHz	500	1k	(Hz)
d. 发射功率 Trans. Power		2	+/-3.0	(dBm)
e. 发射频偏 Trans. freq. deviation	Line IN :1KHz/150mV Loop Current:30mA 调节 VR2	6.0K	+/-0.1	(KHz)
f. 调制失真度 Modulation Distortion	Line IN :1KHz/150mV Loop Current:30mA	1.0	<3	(%)
g. 码频偏 Code Freq. Deviation	充电使 CPU 输出 TXDATA (charging to make CUP output TXDATA)	10K	±3	(KHz)
h. 发射信噪比 Trans. S/N Ratio	Line IN :1KHz/150mV Loop Current:30mA	34	>30	(dB)
i. 发射频响 Trans. Freq. Response	1KHz 为参考 Reference value 1KHz			(dB)
	300Hz			(dB)
	3KHz			(dB)
B:接收部分 RECEIVING PARTS		频道置 CH20 (Set to CH20)		
a. 音频输出 Audio Output	RF IN :926.625MHz/-47dBm/6KHz DEV 调 VR3 Loop Current:30mA	400	±10	(mV)
b. 接收灵敏度 Receiving Sensitivity	RF IN :926.625MHz/6KHz DEV	-116	≤-112	(dBm)
c. 接收失真度 Receiving Distortion	RF IN : 926.625MHz/-47dBm/6KHz DEV Loop Current:30mA	0.8	≤3	(%)
d. 静噪电平 Squelch Level				(dBm)
e. 接收信噪比 Receiving S/N Ratio	RF IN : 926.625MHz/-47dBm/6KHz DEV Loop Current:30mA	50	>40	(dB)
f. 噪声检测 Noise Detecting	调 VR1 (adjust VR1)			
g. 接收频响 Receiving Freq. Response	1KHz 为参考 reference value 1KHz			(dB)
	300Hz			(dB)
	3KHz			(dB)
E:电流测试 TEST CURRENT				
a. 待机电流 Current in Stand-by		50	±5	(mA)
	充电时 During Charging	120	±15	
b. 工作电流 Current in Working State	响铃 During Ringing	100	±15	(mA)
	开机 Conversation state	100	±15	
手机 HANDSET				
A:发射部分 TRANSMITTING PARTS				
a. TXVCO		1.5	+/-0.2	(V)
b. RXVCO		1.5	+/-0.2	(V)
c. 发射频率 Transmitting Freq.	926.625MHz	±500	±1K	(Hz)
d. 发射功率 Transmitting power	926.625MHz	1	+/-3	(dBm)
e. 发射频偏 Trans. Freq. Deviation	调节 VR1, Mic IN :1KHz/16Mv Adj. VR1, Mic in:1KHz/16Mv	6	+/-0.2	(KHz)
f. 调制失真度 Modulation Distortion	Mic IN :1KHz/16mV	0.9	<3	(%)
g. 码频偏 Code Freq. Deviation	按 “#” 键打开 TXDATA	10	±3	(KHz)
h. 发射信噪比 Trans. S/N Ratio	Mic IN :1KHz/20mV	45	>35	(dB)
i. 发射频响 Trans. Freq. Response	1KHz 为参考 (Reference Value 1KHz)			(dB)
	300Hz			(dB)
	3KHz			(dB)
B:接收部分 RECEIVING PART		频道置 CH20 (Set to CH20)		

a. 音频输出 Audio Output	RF IN : 902.600MHz /-47dBm/6KHz DEV	H:500 L:75	±100 ±20	(mV)
b. 接收灵敏度 Receiving Sensitivity	RF IN : 902.600MHz /6KHz DEV	-114	+/-112	(dBm)
c. 接收失真度 Receiving Distortion	RF IN : 902.625MHz /-47dBm/6KHz DEV	0.8	≤3	(%)
d. 接收信噪比 Receiving S/N Ratio	RF IN : 902.625MHz /-47dBm/6KHz DEV	45	>40	(dB)
e. 噪声检测 Noise Detecting	RF IN : 902.625MHz /6KHz DEV	OK	OK	
f. 接收频响 Receiving Freq. Response	1KHz 为参考 (Reference Value 1KHz)			(dB)
	300Hz			(dB)
	3KHz			(dB)
C: 电流测试 CURRENT TESTING				
a. 工作电流 Working Current		110	±15	(mA)
b. 待机电流 Current in Stand-by		5	1	(mA)
c. 充电电流 Current for Charging		50	±10	(mA)
d. 最低工作电压 Lowest Working Volt.		3.0	<3.4	(V)
e. 电池低报警电压 Lowest Alerting Volt. Of Battery		3.3	±0.1	(V)
整 机 PHONE SET				
A: 发号部分 DIALING PARTS				
1. 脉冲拨号 Dialing in Pulse				
a. 脉冲速率 Pulse Rate		10	9-11	(PPS)
b. 断速比 B/M Ratio		40	39-41	(%)
c. 邻串间隔 Interval between dialing Pulse		700	>500	(mS)
d. 拨号通电阻 Close Resistance in dialing		298	<350	(Ω)
e. 拨号断电阻 Open Resistance in Dialing		999	>100	(KΩ)
f. 闪断时间 Flash Time		100-900	100-900	(mS)
g. 暂停时间 Pause Time		1-9	1-9	(S)
2. 音频拨号 Dialing In Tone				
a. 音频信号持续时间 Duration of Tone Signals		98	±2	mS
b. 邻近音频信号间隔时间 Interval between adjacent Tone Signals		100	±2	mS
c. 音频频率群的频率 Freq. of DTMF		0.6	1.5	(%)
行 1 Line 1		697	687-707	(Hz)
行 2 Line 2		770	759-781	(Hz)
行 3 Line 3		852	839-865	(Hz)
行 4 Line 4		941	927-955	(Hz)
列 1 Row 1		1209	1191-1227	(Hz)
列 2 Row 2		1336	1316-1356	(Hz)
列 3 Row 3		1477	1455-1499	(Hz)
d. 高频群信号电平 Signals Level of High Frequencies	18mA	-5	±2	(dBm)
	35mA	-5	±2	
	80mA	-5	±2	
e. 低频群信号电平 Signals Level of Low Frequencies	18mA	-7	±2	(dBm)
	35mA	-7	±2	
	80mA	-7	±2	
f. 高低频群电平差 Level Difference Between High and low Frequency Groups		2	±1	(dB)
B: 电声参数 LOUDNESS RATE PARAMETER				
a. 发送响度评定值(SLR) Sending Loudness Rating	0Km	-47	±2.5	(dB)
	9Km	-42	±2.5	
	15Km	-39	±2.5	
b. 接收响度评定值(RLR) Receiving Loudness Rating	0Km	45	±2.5	(dB)
	9Km	48	±2.5	
	15km	52	±2.5	
c. 侧音掩蔽定值(STMR) Sidetone Masking Rating	0Km	4	>3	(dB)
	9Km	4	>3	
	15Km	4	>3	
d. 发送频响图进框 Sending Freq. Response within Limit		OK	OK	
e. 接收频响图进框 Receiving Freq. Response within limit		OK	OK	

f. 发送振幅特性 (OKm) Specification of Sending Amplitude	-10 - 0dB			(dB)
	0 - +10dB			
h. 回声回损 (EBRL)		15	>11	(dB)
i. 发送失真 Sending Distortion	300Hz	4	<5	%
	500Hz	4	<5	
	1000Hz	2	<5	
j. 接收失真 Receiving Distortion	300Hz	4	<5	%
	500Hz	4	<5	
	1000Hz	2	<5	
C:直流阻抗 DC IMPEDANCE (28mA LOOP)				
a. 接电话直流阻抗 DC Impedance in Contacting		235	±10	(Ω)
b. 保持电话直流阻抗 DC Impedance in Communication		220	<300	
C:铃声参数 RINGING LEVEL PARAMETER (用声压表的A权在离机50cm距离检测) Test by voltmeter with grade A and 50cm far from phone.				
a. 铃声输出电平 Ringing Output Level		80	>70	dB(A)
b. 起振电压@20Hz Limit Volt of Ringing at 20Hz		35	<40	(Vrms)
c. 铃声交流阻抗 AC Impedance of Ringing			>3	(KΩ)

一、手机板 CS6209HM.pcb TX 调校 (Calibrate CS6209HM.PCB OF HANDSET)			
项目 Item	操 作 步 骤 Operating Procedure	位置 Location	指 标 Specification
1	将 PCB 放入测试架, 打开电池开关观察电流表读数是否满足指标 Put PCB onto testing frame, turn on battery and then observe if voltage meets relevant requirements.		1-60mA
2	系统进入测试模式 CH20, 观察电流表是否满足指标 System gets in Test Mode CH20 then observe if current meets relevant requirements.		110mA
3	频率为 926.950MHz (Frequency is 926.950MHz)		±1KHz
4	调节 VR1 使频偏仪读数为 6.0K±0.1 (MIC 输入 16mV) Adjust VR1 to make Freq. deflection tester getting 6.0K±0.1 (input 16mV to MIC)	w1	6.0K±0.1
5	调试完毕 End of adjustment		
二、手机板接收调校 CALIBRATE RECEIVING PART OF HANDSET PCB			
1	系统进入测试模式 CH20, 看输出幅度失真 (高频信号输入 902.690MHz /-47dBm/6KHz DEV) System gets into Test Mode CH20, check output amplitude distortion (input high Freq. 902.690MHz/-47dBm/6KHz DEV)		≤3%
2	调节高频信号输出幅度,使 SPK 输出够大噪音,调节 VR2,观察观察 RSSI 有无跳变 Adjust output amplitude of high Freq. signal to make SPK output noise heavy enough, then adjust VR2, check RSSI trip or not	INUSE	
3	看 SPK 输出幅度(调节低档, 观察高档) Check SPK output amplitude (adjust in low level but observe in high level)	VOL KEY	75mV
4	测试完毕 End of testing		
三、手机键控板测试步骤 TESTING PROCEDURE OF HANDSET FSK			
1	进入测试状态, 观察电流表, 是否满足指标 Get into Test Mode to check if current displayed in meter meets requirement or not		110+/-15mA
2	置分析仪“Bell“, 手机应有 Beep 声发出, 按”1, 2, 3, 4, 5, 6, 7, 8, 9, 10, #” Set to “Bell” on Analyzer, the handset shall beeps, press “1,2,3,4,5,6,7,8,9,10,#”		
3	按充电开关, 观察充电电流是否在指标范围之内 put into charging state to observe if charging current meet specified specification.		40~80mA
4	按下 LOW BATT 3.20V, 蜂鸣器应有 Beep 声发出 Press LOW BATT 3.20V, the Buzzer shall beeps.		3.2v±0.1V
5	测试完毕 End of testing		
四、主机 PCB (CS6209ABM.PCB)TX 调校 CALIBRATE PCB (CS6209ABM.PCB)TX OF BASE			
1	按“PAGE”键, 打开电源开关, 自动进入 20 频道测试, 观察电流表读数是否在范围之内 Press PAGE, turn on power switch same time then auto get into CH20 testing mode, check degree of current meter under specified scale.		110mA±15mA
2	看频率计读数为 902.950MHz Check degree of Freq. tester is 902.950MHz.		±1KHz
3	调节 VR2 使频偏仪读数为 6K±0.1(线输入 1KHz/150mV) Adjust VR2 to make Freq. Deflection tester display 6K±0.1(line input 1KHz/150mV)	VR2	6K±0.1
五、主机 PCB 接收调校 CALIBRATE RECEIVING CONDITION OF BASE PCB			
1	将 PCB 放入测试架, 按“PAGE”键, 打开电源开关, 自动进入 20 频道测试模式 Put PCB onto Testing Frame, press PAGE and turn on power switch same time, the system gets into Test Mode CH20 automatically.		
2	看解调输出幅度失真 (高频信号输入 902.950MHz /-47dBm/6KHz DEV) 调节 VR3 使外线输出 400mV Check distortion of demodulating output amplitude(input high freq. 902.950MHz/-47dBm/6KHz DEV)	VR3	400mV±10mV

	Adjust VR3 to make line output 400mV		
3	调节高频信号输出幅度,使解调输出够大噪音,观察 RSSI 有无跳变 Adjust output amplitude of high freq. signal to make demodulator output noise heavy enough then observe RSSI tripping or not.	INUSE LED	
六、主机功能检测 FUNCTION TESTING OF BASE			
1	将主机板放入测试架,置分析仪“铃声”手机应有清晰的铃声发出 Put base onto Testing Frame, set Analyzer to “Bell”, handset shall ring clearly.		80mVA
2	按“TALK”键,电话接通,吹咪,分析低度指针有摆动,打 RX,喇叭应有蜂音 Press “TALK”, phone get connected, blow in front of Mic. The pointer of Analyzer shall deflect Change switch of Analyzer to RX point, the speaker shall spread out buzzer.		
3	置 P/T 开关于 T, 手机拨“1, 2, 3, ---0, #” 分析仪有 PASS 声发出 Set P/T switch to T, dial “1,2,3,...0,#” on handset Analyzer shall give a bell indicating PASS		
4	置 P/T 开关于 P, 手机拨“1, 5, 9, 0” 分析仪有 PASS 声发出 Set P/T switch to P, dial “1,5,9,0”, the Analyzer shall give a bell indicating PASS		

NEWCONT NS305 方案座机/手机频率表 (NTP-6211B)

NEWCONT FREQUENCY LIST FOR

NS305 PLAN BASE/HS (NTP-6211B)

信道 CHANNEL	发射/接收频率 (MHz) TX/RX FREQUENCY (MHz)	接收/发射频率 (MHz) RX/TX FREQUENCY(MHz)
1	902.125000	926.150000
2	902.150000	926.175000
3	902.175000	926.200000
4	902.200000	926.225000
5	902.225000	926.250000
6	902.250000	926.275000
7	902.275000	926.300000
8	902.300000	926.325000
9	902.325000	926.350000
10	902.350000	926.375000
11	902.375000	926.400000
12	902.400000	926.425000
13	902.425000	926.450000
14	902.450000	926.475000
15	902.475000	926.500000
16	902.500000	926.525000
17	902.525000	926.550000
18	902.550000	926.575000
19	902.575000	926.600000
20	902.600000	926.625000
21	902.625000	926.650000
22	902.650000	926.675000
23	902.675000	926.700000
24	902.700000	926.725000
25	902.725000	926.750000
26	902.750000	926.775000
27	902.775000	926.800000

28	902.800000	926.825000
29	902.825000	926.850000
30	902.850000	926.875000
31	902.875000	926.900000
32	902.900000	926.925000
33	902.925000	926.950000
34	902.950000	926.975000
35	902.975000	927.000000
36	903.000000	927.025000
37	903.025000	927.050000
38	903.050000	927.075000
39	903.075000	927.100000
40	903.100000	927.125000