

SCP-5300/H.US Adjustment & Inspection Specifications for Mass production.

Model Code NO.	1-163-435-00
Model NO.	SCP- 5300/H.US

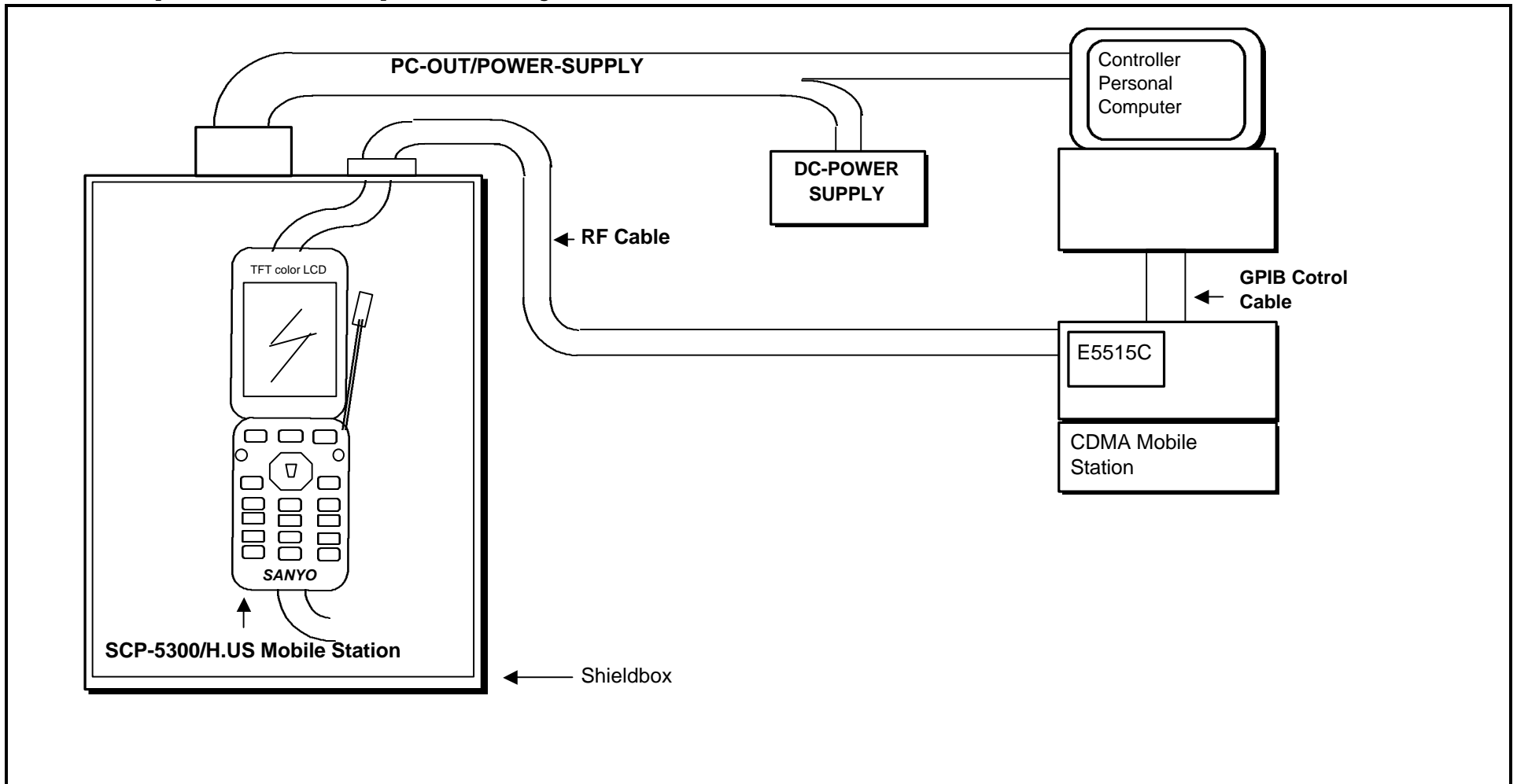
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2.	Adjustment Values
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Minor Change Version

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1. Set-Up for Tune-Up and Adjustment of Transmitter



3.Adjustment Value

1.CELLULAR(AMPS) Adjustment					
ITEM	Sub-ITEM	Handset Setup (Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Tx-Power Adjustment	PL=0,1,2	<u>Normal Test Mode</u>	<u>AMPS Mode</u>	+24.0dBm	
	PL=3	Tx AGC SET : 3-2-3-2	Txpower :dBm Mode	+23.0dBm	
	PL=4			+19.0dBm	
	PL=5			+15.0dBm	
	PL=6			+11.0dBm	
	PL=7			+ 7.0dBm	
Tx-Power Frequency Adjustment	Bk 0=1017ch	<u>FCC Test Mode</u>	<u>PL=0</u>	+24.0dBm	
	Bk 1=46ch			+24.0dBm	
	Bk 2=98ch			+24.0dBm	
	Bk 3=150ch			+24.0dBm	
	Bk 4=202ch			+24.0dBm	
	Bk 5=254ch			+24.0dBm	
	Bk 6=306ch			+24.0dBm	
	Bk 7=358ch			+24.0dBm	
	Bk 8=410ch			+24.0dBm	
	Bk 9=462ch			+24.0dBm	
	Bk10=514ch			+24.0dBm	
	Bk11=566ch			+24.0dBm	
	Bk12=618ch			+24.0dBm	
	Bk13=670ch			+24.0dBm	
	Bk14=722ch			+24.0dBm	
Bk15=774ch			+24.0dBm		
Frequency Sensibility Adjustment		<u>FCC Test Mode : AMPS</u> Tx : ST,CH : 358	<u>AF ANL Mode</u> Detector : Pk±Max DE-EMPH:750us Fil1:>300Hz, Fil2:<15kHz pass	8.0KHz dev.	dev. 7.7kHz±0.1kHz ↓ NV_FM_FREQ_SENSE_GAIN_I
RSSI Adjustment	-60dBm In -113dBm In	<u>FCC TEST Mode</u> RSSI=Filter*116+AgcRSSI*47	-60dBm RFinput -113dBm RFinput	-60dBm : BAR4 BAR1	<u>NV_FM_RSSI_I</u>

*Handset SETUP & E5515C SETUP is Auto Set by Controller (Personal Computer).

3.Adjustment Value

2.PCS(CDMA) RX Adjustment					
ITEM	Sub-ITEM	bandset Setup(Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Rx-RASRAM Adjustment	Table 1	Normal Mode	CDMA Ch=563 :SG LV=-106.0dBm	-106.0dBm	
	Table 2	OFF Line Mode	SG LV=-100.6dBm	-100.6dBm	
	Table 3		SG LV=-95.3dBm	-95.3dBm	
	Table 4		SG LV=-90.0dBm	-90.0dBm	
	Table 5		SG LV=-84.7dBm	-84.7dBm	
	Table 6		SG LV=-79.4dBm	-79.4dBm	
	Table 7		SG LV=-74.1dBm	-74.1dBm	
	Table 8		SG LV=-68.8dBm	-68.8dBm	
	Table 9		SG LV=-63.5dBm	-63.5dBm	
	Table 10		SG LV=-58.1dBm	-58.1dBm	
	Table 11		SG LV=-52.8dBm	-52.8dBm	
	Table 12		SG LV=-47.5dBm	-47.5dBm	
	Table 13		SG LV=-42.2dBm	-42.2dBm	
	Table 14		SG LV=-36.9dBm	-36.9dBm	
	Table 15		SG LV=-31.6dBm	-31.6dBm	
	Table 16		SG LV=-26.3dBm	-26.3dBm	
	Table 17		SG LV=-21.0dBm	-21.0dBm	
RX AGC Frequency Adjustment	Bk 0=38ch	Normal Mode	RF INPUT(SG) LV=-63.5dBm	AGC DIFF.	
	Bk 1=113ch	Reference ch :1163ch	Change to Channel 16 Time.	AGC DIFF.	
	Bk 2=188ch	Deference of Center ch AGCsym.		AGC DIFF.	
	Bk 3=263ch	Change to Channel 16 Time.		AGC DIFF.	
	Bk 4=338ch	OFF Line Mode		AGC DIFF.	
	Bk 5=413ch			AGC DIFF.	
	Bk 6=488ch			AGC DIFF.	
	Bk 7=563ch			AGC DIFF.	
	Bk 8=638ch			AGC DIFF.	
	Bk 9=713ch			AGC DIFF.	
	Bk10=788ch			AGC DIFF.	
	Bk11=863ch			AGC DIFF.	
	Bk12=938ch			AGC DIFF.	
	Bk13=1013ch			AGC DIFF.	
	Bk14=1088ch			AGC DIFF.	
Bk15=1163ch			REF CH.		

3.Adjustment Value

5.CELLULAR(CDMA) RX Adjustment					
ITEM	Sub-ITEM	Handset Setup(Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Rx-RASRAM Adjustment	Table 1	<u>Normal Mode</u>	cdma Ch=358: SG LV=-106.0dBm	-106.0dBm	RX_LIN_OFF : >5
	Table2	OFF Line Mode	SG LV=-100.6dBm	-100.6dBm	RX_LIN_SLP : 0-1F
	Table3		SG LV=-95.3dBm	-95.3dBm	RX_LIN_SLP : 0-1F
	Table4		SG LV=-90.0dBm	-90.0dBm	RX_LIN_SLP : 2-1F
	Table5		SG LV=-84.7dBm	-84.7dBm	RX_LIN_SLP : 2-1F
	Table6		SG LV=-79.4dBm	-79.4dBm	RX_LIN_SLP : 2-1F
	Table7		SG LV=-74.1dBm	-74.1dBm	RX_LIN_SLP : 2-1F
	Table8		SG LV=-68.8dBm	-68.8dBm	RX_LIN_SLP : 2-1F
	Table9		SG LV=-63.5dBm	-63.5dBm	RX_LIN_SLP : 2-1F
	Table10		SG LV=-58.1dBm	-58.1dBm	RX_LIN_SLP : 2-1F
	Table11		SG LV=-52.8dBm	-52.8dBm	RX_LIN_SLP : 2-1F
	Table12		SG LV=-47.5dBm	-47.5dBm	RX_LIN_SLP : 2-1F
	Table13		SG LV=-42.2dBm	-42.2dBm	RX_LIN_SLP : 2-1F
	Table14		SG LV=-36.9dBm	-36.9dBm	RX_LIN_SLP : 2-1F
	Table15		SG LV=-31.6dBm	-31.6dBm	RX_LIN_SLP : 2-1F
	Table16		SG LV=-26.3dBm	-26.3dBm	RX_LIN_SLP : 0-1F
	Table17		SG LV=-21.0dBm	-21.0dBm	RX_LIN_SLP : 0-1F
RX AGC Frequency Adjustment	Bk 0=1017ch	<u>Normal Mode</u>	<u>RF INPUT (SG) LV=-66.2dBm</u>	AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 1=46ch	Reference ch : 358ch	Change to Channels 16 Times.	AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 2=98ch	Deference of Center ch AGCsym.		AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 3=150ch	Change to Channels 16 Times.		AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 4=202ch	OFF Line Mode		AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 5=254ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 6=306ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 7=358ch			Center CH	RXCOMP_VS_FREQ : 0
	Bk 8=410ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk 9=462ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk10=514ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk11=566ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk12=618ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk13=670ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
	Bk14=722ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14
Bk15=774ch			AGC DIFF.	RXCOMP_VS_FREQ : E7-14	

3.Adjustment Value

6 CELLULAR(CDMA)LNA GAIN CONTROL

ITEM	Sub-item	Handset Setup	E5515C Setup	Adj. Value	Accuracy of NV-Value	
LNA Adjustment	LNA OFFSET	Measurement AGC Value : High Gain	Reference ch: 358ch		LNA_OFFSET:358Ch Measurement	
		Measurement AGC Value : MiddleGain	RF INPUT(SG)LV=-96.0dBm			
		Compare Gain,High Gain with MiddleGain	Change toChanneles 16 Times			
	LNA OFFSET FREQ					
		Bk0-1017Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk1-46Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk2-98Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk3-150Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk4-202Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk5-254Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk6-306Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk7-358Ch			Center CH	
		Bk8-410Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk9-462Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk10-514Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk11-566Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk12-618Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
		Bk13-670Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk14-722Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch	
	Bk15-774Ch			OFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch	
	LNA12OFFSET	Measurement AGC Value : High Gain	Reference ch: 358ch		LNA 12OFFSET:358Ch Measurement	
		Measurement AGC Value : Low Gain	RF INPUT(SG)LV=-85.0dBm			
		Compare Gain,High Gain with MiddleGain	Change to Channeles 16 Times			
	LNA12OFFSET FREQ					
		Bk0-1017Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk1-46Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk2-98Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk3-150Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk4-202Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk5-254Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk6-306Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk7-358Ch			Center CH	
		Bk8-410Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk9-462Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk10-514Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk11-566Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk12-618Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
		Bk13-670Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk14-722Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch	
	Bk15-774Ch			OFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch	

3.Adjustment Value

7.CELLULAR(CDMA)TX&TX-LIMIT Adjustment					
ITEM	Sub-ITEM	Handset Setup (Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Tx-RASRAM -> Adjustment		Normal Test Mode	CDMA Ch=358ch	+23.4dBm	
			SG LEVEL according to the transmission	-50.0dBm	
		TOTAL: 36 Parametor	Power LEVEL of MS		
		HIGH POWER MODE			
		LOW POWER MODE			
		2 TIMES ADJUSTMENT			
	& Tx-Limit -> Adjustment	Table1	Only HIGH POWER MODE	CDMA Ch=358ch	+11.75dBm
Table2				+13.1dBm	
Table3				+14.4dBm	
Table4				+15.7dBm	
Table5				+17.1dBm	
Table6				+18.4dBm	
Table7				+19.7dBm	
Table8				+21.1dBm	
Table9				+22.4dBm	
Table10				+23.7dBm	
Table11				+25.1dBm	
Table12				+26.4dBm	
Table13				+27.7dBm	
Table14				+29.0dBm	
Table15				+30.4dBm	
Table16				+31.7dBm	
OFFSET			Offset : 18.4dBm(Table 6)		+19.7dBm
SPN		Spn : 26.4dBm(Table 12)		+29.0dBm	

3.Adjustment Value

8.CELLULAR(CDMA)AGC Frequency Adjustment and TX Limit Frequency Adjustment						
ITEM	Sub-ITEM	Handset Setup (Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value	
TX AGC Frequency Adjustment	BK 0~15 *1 (ch)	Nomal Test Mode	<u>RF INPUT(SG) LV=High:-89.0dBm</u>			
		Reference ch: 358ch	<u>RF INPUT(SG) LV=Low:-66.2dBm</u>			
		Difference of Center ch AGCsym.				
		Change to Channels 16 Times.	Change to Channels 16 Times.			
		HIGH POWER MODE			Tx-Pow diff.	TX_Comp vs FREQ
		LOW POWER MODE				
		2 TIMES ADJUSTMENT				
HDET Frequency Adjustment	BK 0~15 *1 (ch)	Nomal Test Mode	<u>RF INPUT(SG) LV=-89.0dBm</u>			
		Reference ch: 358ch				
		Difference of HDET	Change to Channels 16 Times.			
		Change to Channels 16 Times.				
		Only HIGH POWER MODE			Hdet diff.	HDET_VS_FREQ
TX Limit Frequency Adjustment	BK 0~15 *1 (ch)	Nomal Test Mode	<u>RF INPUT(SG) LV=-96.3dBm</u>			
		Reference ch: 358ch				
		Difference of Center ch AGCsym.	Change to Channels 16 Times.			
		Change the Channel 16 Times.			*2	TX_Lim_vs_Freq
		Only HIGH POWER MODE				

*1 BK 0~15 : BK0=1017,BK1=46,BK2=98,BK3=150,BK4=202,BK5=254,BK6=306,BK7=358,BK8=410,BK9=462,BK10=514,BK11=566,BK12=618,BK13=670,BK14=774

*2 : TX-Power Diffrencial + ADC Diffrencial xLimit Table Value

4.Measurement Specification of Adjustment

1.Measurement Specification		CELLULAR(AMPS)				
Measurement Item	Standard Item	IS98A Standard Spec	Measurement Spec	Measurement Condition	Measurement Channel	Others
Tx-Frequency Err	TIA/EIA-98-B:3.1.2	< ±2.5ppm	< ±2.0ppm	Measurement Equipment Accuray < 0.1ppm	383(M)	
Tx-Power Level(0,1,2)	TIA/EIA-98-B:3.2.1	24dBm to 30dBm (ERP)	22.0dBm to 25.0dBm 22.0dBm to 25.0dBm 22.0dBm to 25.0dBm	Measurement Equipment	991(L)	
					383(M)	
					799(H)	
Tx-Power Level(3)	TIA/EIA-98-B:3.2.1	20dBm to 26dBm (ERP)	20.0dBm to 24.3dBm		383(M)	
Tx-Power Level(4)	TIA/EIA-98-B:3.2.1	16dBm to 22dBm (ERP)	16.0dBm to 21.0dBm		383(M)	
Tx-Power Level(5)	TIA/EIA-98-B:3.2.1	12dBm to 18dBm (ERP)	12.0dBm to 17.0dBm		383(M)	
Tx-Power Level(6)	TIA/EIA-98-B:3.2.1	8dBm to 14dBm (ERP)	8.0dBm to 13.0dBm		383(M)	
Tx-Power Level(7)	TIA/EIA-98-B:3.2.1	4dBm to 10dBm (ERP)	4.0dBm to 9.0dBm		383(M)	
Deviation Limitting	TIA/EIA-98-B:3.3.2.3	< ±12Khz dev.	< ±12Khz dev.	Comp=ON,SAT=OFF HF Mode,Mic=6.3V IN	383(M)	
Wideband Data	TIA/EIA-98-B:3.3.3	±8Khz dev. ± 10%	±8Khz dev. ± 10%	Wideband Mode	383(M)	
SAT Level	TIA/EIA-98-B:3.3.4	±2Khz±0.2Khz dev.	±2Khz±0.2Khz dev.	SAT Mode	383(M)	
ST Level	TIA/EIA-98-B:3.3.5	±8Khz dev. ± 10%	±8Khz dev. ± 10%	ST Mode	383(M)	
Audio Distortion	TIA/EIA-98-B:2.2.2.5	< 5%	<5%	Voice Mode 8KHZdev -50dBm	383(M)	
Audio Level		Medium High(with ABB)	50.0mV±3dB	2.9Kdev(1khz)	383(M)	
SINAD	TIA/EIA-98-B:2.3.1	> 12dB	> 12dB	RF IN = -116.5dBm	991(L),799(H)	

4.Measurement Specification of Adjustment

2.Measurement Specification		PCS(CDMA)				
Measurement Item	Standard Item	IS98C Standard Spec	Measurement Spec	Measurement Condition	Measurement Channel	Others
<i>RTC Demod. of FW.ch</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
AWGN Test10(Eb/Nt=4.1)	3.4.1	1%(0.010)	1%(0.010)	7200(TEST10)	25ch	
<i>Waveform Quality</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
RHO	4.3.4	>0.944	>0.944	14400bps	25ch	
Frequency Err Rate	4.1.1	±150Hz	±150Hz		25ch	
Time Offset	4.3.1	±1uS	±1uS		25ch	
<i>TTC Range of Openloop</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
Openloop Power Test1	4.4.1	-51±9.5(CLASS II)	-51±9.5(CLASS II)	14400bps	25ch	
Openloop Power Test2		-11±9.5(CLASS II)	-11±9.5(CLASS II)		25ch	
Openloop Power Test3		20±9.5(CLASS II)	20±9.5(CLASS II)		25ch	
<i>TTC Range of Closedloop</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
Closedloop Full Power	4.4.4	RF Output = -15dBm	-14±3dBm	14400bps	25ch	
Closedloop Max Power		>+24dB	>+24dB			
Closedloop Min Power		<-24dB	<-24dB			
<i>TTC Min. Controlled Pow</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
Minimum Controlled Pow	4.4.6	-50dBm/1.23MHz	-50dBm/1.23MHz	14400bps	25ch	
<i>RTC Receiver Sensitivity</i>	TIA/EIA-98-D			Rate2 Full -106.8dBm	600ch, 1175ch	
Receiver Sensitivity FER	3.5.1	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -106.0dBm	25ch	
<i>Single Tone Desens.</i>	TIA/EIA-98-D			Rate2 Full -101.0dBm		
Sensitivity FER	3.5.2	1.0%(Confidence95%)	1.0%(Confidence95%)	Undesired>-30dBm	1175ch(-)	
<i>TTC Max RF Output Pow</i>	TIA/EIA-98-D				25ch	
Max Power Output	4.4.5	23.0dBm~30.0dBm (EIRP)	22.0dBm~24.8dBm 22.0dBm~24.8dBm 21.5dBm~24.3dBm		600ch 1175ch	
<i>TTC Conducted Spurious</i>	TIA/EIA-98-D			SCV Opt9(14400)		
>1.25MHz	4.5.1	< -42dBc	< -43dBc	Max Power Output	1175ch	
>1.98MHz		< -50dBc	< -56dBc	Max Power Output	1175ch	
>4.00MHz		< -13dBm				

3. Measurement Specification CELLULAR(CDMA)

Measurement Item	Standard Item	IS98D Standard Spec	Measurement Spec	Measurement Condition	Measurement Channel	Others
<i>RTC Demod. of FW.ch</i>	TIA/EIA-98-D 3.4.1			Rateset2 SVC opt9		
AWGN Test10(Eb/Nt=4.0)		1%(0.010)	1%(0.010)	7200(TEST10)	384ch	
<i>Waveform Quality</i>	TIA/EIA-98-D			Rateset2 SVC opt9	384ch	
RHO	4.3.4	>0.944	>0.944	14400bps	1013ch, 777ch	
Frequency Err Rate	4.1.1	±300Hz	±300Hz			
Time Offset	4.3.1	±1uS	±1uS			
<i>TTC Range of Openloop</i>	TIA/EIA-98-D	dBm	dBm	Rateset2 SVC opt9	384ch	
Openloop Power Test1	4.4.1	-48±9.5(CLASS III)	-48±9.5(CLASS III)	14400bps	1013ch, 777ch	
Openloop Power Test2		- 8±9.5(CLASS III)	- 8±9.5(CLASS III)			
Openloop Power Test3		20±9.5(CLASS III)	20±9.5(CLASS III)			
<i>TTC Range of Closedloop</i>	TIA/EIA-98-D			Rateset2 SVC opt9	384ch	
Closedloop Full Power	4.4.4	RF Output = -15dBm	-14±3dBm	14400bps	1013ch, 777ch	
Closedloop Max Power		>+24dB	>+24dB			
Closedloop Min Power		<-24dB	<-24dB			
<i>TTC Min.Controlled Pow</i>	TIA/EIA-98-D			Rateset2 SVC opt9	384ch	
Minimum Controlled Pow	4.4.6	-50dBm/1.23MHz	-50dBm/1.23MHz	14400bps		
<i>RTC Receiver Sensitivity</i>	TIA/EIA-98-D	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -106.8dBm	384ch, 777ch	
Receiver Sensitivity FER	3.5.1	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -106.0dBm	1013ch	
<i>Single Tone Desens.</i>	TIA/EIA-98-D	1.0%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -101.0dBm	384ch	
Sensitivity FER	3.5.2			Undesired>-30dBm		
<i>TTC Max RF Output Pow</i>	TIA/EIA-98-D	23.0dBm~30.0dBm	22.0dBm~24.8dBm		1013ch	
Max Power Output	4.4.5	(EIRP)	22.0dBm~24.8dBm		384ch	
			21.5dBm~24.3dBm		777ch	
<i>TTC Conducted Spurious</i>	TIA/EIA-98-D			SCV Opt9(14400)		
>885KHZ	H4.5.1	< -42dBc	< -43dBc	Max Power Output	1013ch, 777ch	
>1.98MHz		< -54dBc	< -56dBc	Max Power Output	1013ch, 777ch	
>4.00MHz		< -13dBm				

4. Measurement Specification(1X)		PCS(CDMA)				
Measurement Item	Standard Item	TIA/EIA-98-C StandardSpec(1X)	Measurement Spec	Measurement Condition	Measurement Channel	Others
Waveform Quality	TIA/EIA-98-D			RC3,S02		
RHO	4.3.4	>0.944	>0.944	Pilot Ec/Io -7dB	600ch	
Frequency Err Rate		±150Hz	±150Hz	Traffic Ec/Io -7.4dB	600ch	
Time Offset		±1uS	±1uS	Ior -101dBm	600ch	
Code Domain Power	TIA/EIA-98-D			RC3,S02		
	4.3.5	>23dBc	>23dBc	Pilot Ec/Io -7dB	25ch	
				Traffic Ec/Io -7.4dB		
				Ior -101dBm		
TTC Range of Openloop	TIA/EIA-98-D			RC3,S02		
Openloop Power Test1	4.4.1	dBm	dBm	Ior -25dBm	600ch	
Openloop Power Test2		-54.2±9.5	-54.2±9.5	Ior -65dBm	600ch	
Openloop Power Test3		-14.2±9.5	-14.2±9.5	Ior -97dBm	600ch	
		16.8±9.5	16.8±9.5			

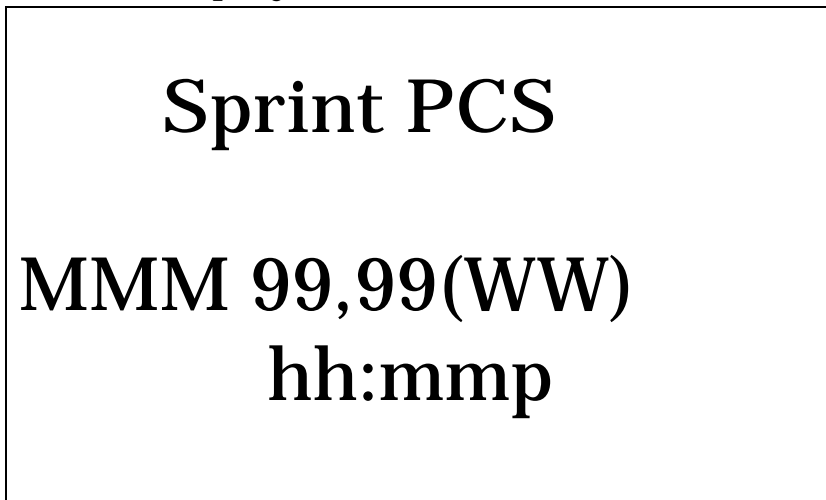
5. Measurement Specification(1X)		CELLULAR(CDMA)				
Measurement Item	Standard Item	TIA/EIA-98-C StandardSpec(1X)	Measurement Spec	Measurement Condition	Measurement Channel	Others
Waveform Quality	TIA/EIA-98-D			RC3,S02		
RHO	4.3.4	>0.944	>0.944	Pilot Ec/Io -7dB	384ch	
Frequency Err Rate		±300Hz	±300Hz	Traffic Ec/Io -7.4dB	384ch	
Time Offset		±1uS	±1uS	Ior -101dBm	384ch	
Code Domain Power	TIA/EIA-98-D			RC3,S02		
	4.3.5	>23dBc	>23dBc	Pilot Ec/Io -7dB	384ch	
				Traffic Ec/Io -7.4dB		
				Ior -101dBm		
TTC Range of Openloop	TIA/EIA-98-D			RC3,S02		
Openloop Power Test1	4.4.1	dBm	dBm	Ior -25dBm	384ch	
Openloop Power Test2		-51.2±9.5	-51.2±9.5	Ior -65dBm	384ch	
Openloop Power Test3		-11.2±9.5	-11.2±9.5	Ior -97dBm	384ch	
		16.8±9.5	16.8±9.5			

FCC TEST MODE OPERATION MANUAL

[FCC TEST Start Up]

1): Push the "POWER" Key.

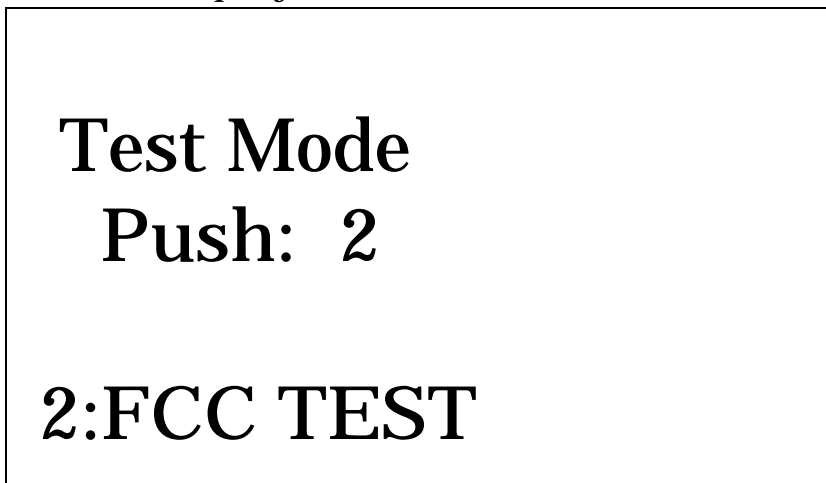
(LCD Display)



2): It transits to "Test_Mode".

Push the "OK" Key and Push the "WEB" Key .

(LCD Display)



[**AMPS Mode**]

1) **RX Mode Display (Receiving only)**

(LCD Display)

FCC AMPS RX
MODE
CHANNEL RV PATH
(No display)
(No display)

MODE : "RX"
CHANNEL : "CH: Current Channel Number"
RV PATH : "Dis or Ena"
(Dis =Disable Receiving voice path)
(Ena =Enable Receiving voice path)

2) **RX and TX mode Display**

1) **Push "TALK" Key.**

(LCD Display)

FCC AMPS TX
MODE
CHANNEL RV PATH
COMPRESSOR
POWER VOICE PATH

MODE : "TX"
CHANNEL : "CH: Current Channel Number"

COMPRESSOR : “Comp : ON” or “Comp : OFF”
POWER : “Tx Pwr : Number of 0 to 7”

The target Tx power is as follows .

0 = 1 = 2 = 24.0 dBm

3 = 23.0 dBm

4 = 19.0 dBm

5 = 15.0 dBm

6 = 11.0 dBm

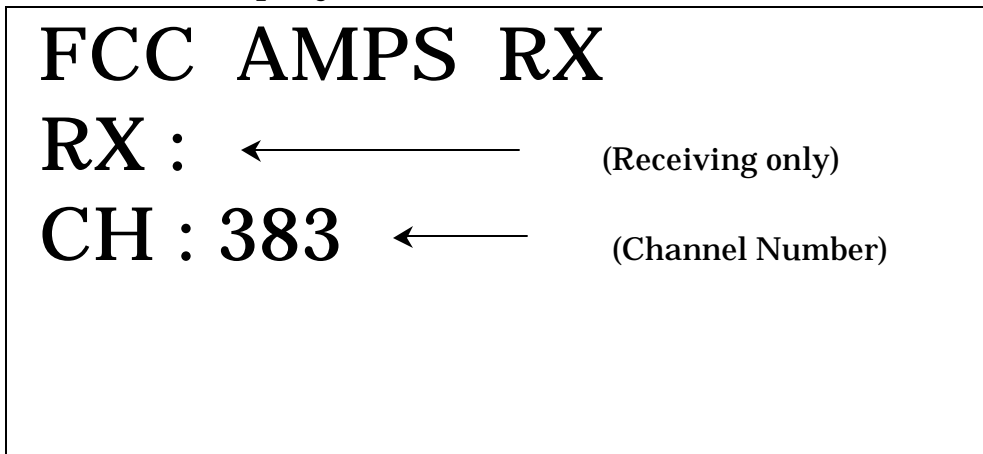
7 = 7.0 dBm

RV PATH : “Dis or Ena”
(Dis =Disable Receiving voice path)
(Ena =Enable Receiving voice path)

VOICE PATH : “FREE, HAND or HEAD”

3) RX Mode Settings (default : Receiving only)

(LCD Display)



1) Setting the channel

Push the “ * ” Key.

(Sequentially switched “ 383 → 799 → 991 ”)

2) Switch the mod. (RX mode to RX/TX Mode)

Push the “TALK ” Key. (Switched to RX/TX Mode)

<RX Mode Parameter>

TX/RX Voice Path : Dis

Mic : OFF

Speaker : OFF

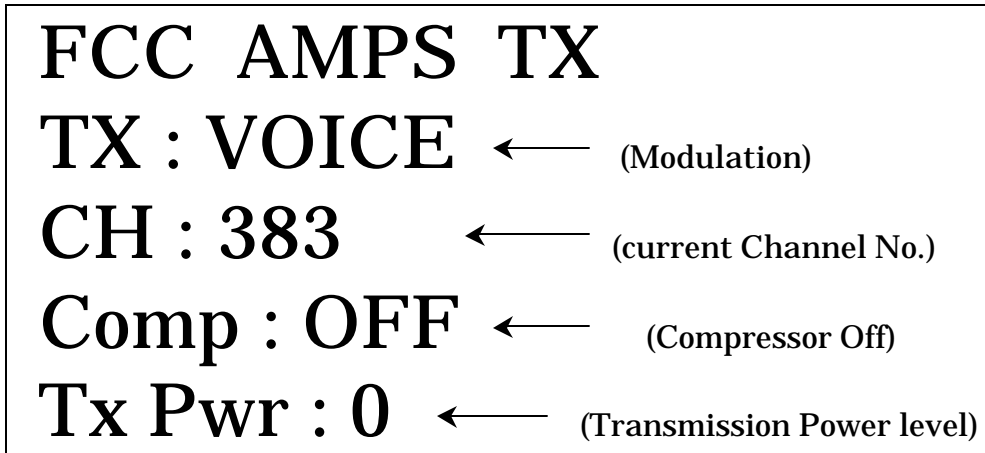
TX : OFF

RX : ON

ANT : Inner Antenna active

4) **RX / TX Mode Settings**

(LCD Display)



1) **Setting the Channel**

Push the “* ” Key

(Sequentially switched “**383** → **799** → **991** “)

Note : If displayed TX : SAT+DTMF, can not set the Channel.

Please change another modulation. (See next section)

2) **Setting the Modulation**

Push the “ ▲ ” Key(up)

(Sequentially switched “**No Modula** → **VOICE** → **WBD** → **SAT** →
ST → **SAT+VOICE** → **SAT+ST** → **SAT+DTMF**)

No Modula	: No Modulation
VOICE	: Mic ON, that is, activated Audio path.
WBD	: Activated Wide Band Data
SAT	: Output SAT
ST	: Output ST
SAT+VOICE	: Mic. ON, modulation signal is Voice added SAT.
SAT+ST	: The modulation signal is SAT added ST.
SAT+DTMF	: With push anyone of 10Keys, the modulation signal is SAT added DTMF.

3) **Setting the compressor**

push the “3” Key : Compressor ON (displayed “**Comp : ON**”)

Push the **"BACK"** Key : Compressor OFF (displayed **"Comp: OFF"**)

Note: When set the **SAT+DTMF** Mode, then can not to set the compressor.

4) Setting the transmission power level.

Displayed the transmission level No, that is, 0 to 7.

Push the **"4"** Key. (Up the transmission level, decrement a number)

Push the **"6"** Key. (Down the transmission level, increment a number)

Note: When set the **SAT+DTMF** Mode, then can not to set the **power level**.

5) Switch the Mode. (TX Mode → RX Mode)

Push the **"END"** Key.

Note: When set the **SAT+DTMF** Mode, then can not to switch the **RX Mode**.

6) Setting the RV PATH

Push the **"1"** Key. (Enable the receiving voice path)

Push the **"2"** Key. (Disable the receiving voice path)

Note: When set the **SAT+DTMF** Mode, then can not to set the receiving voice path.

7) Change the VOICE PATH (CODEC path).

Push the **"#"** Key.

(Sequentially switched **"FREE → HAND → HEAD"**)

Note: Except **VOICE** and **SAT+VOICE** modes, can not change the voice path.

FREE: External I/F active

HAND: Internal Mic active

HEAD: Ear/Mic active

When input the voice signal, let you set the "FREE" and use the External I/F .

8) Quit.

Push the **"END"** Key . (Exit FCC AMPS Test Mode.)

(Display change the initial Screen, see page 2)

Push the **"END"** Key . (Exit FCC Test Mode.)

(Display change the initial Screen, see page 1)

[PCS Mode]

1) Tx, TRx and Rx Mode

(Tx mode) : Tx power is Max, Tx activate only

(LCD Display)

<p>FCC PCS</p> <p>Tx</p> <p>CH : 25 ← (Channel Number)</p> <p>XX (Don't Care)</p> <p>XX (Don't Care)</p>

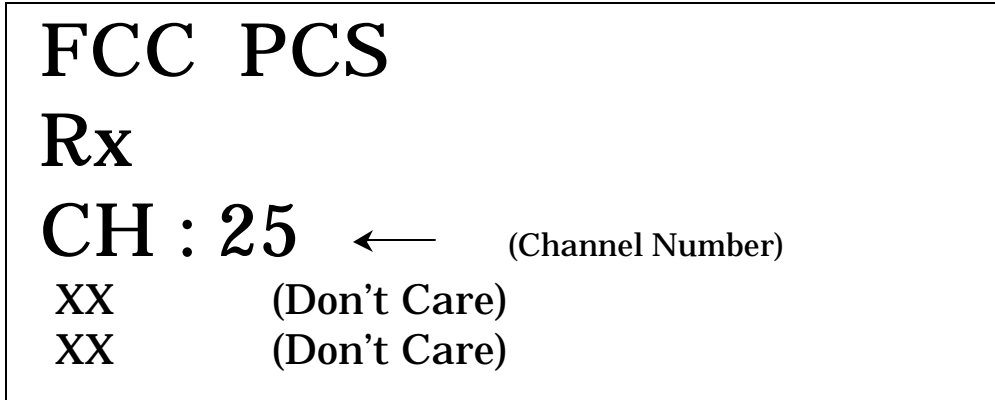
(Tx/Rx mode) : Tx power is estimate -13dBm, Tx/Rx activate

(LCD Display)

<p>FCC PCS</p> <p>TRx</p> <p>CH : 25 ← (Channel Number)</p> <p>XX (Don't Care)</p> <p>XX (Don't Care)</p>
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(Rx Mode) : Tx power is off, Rx activate only

(LCD Display)



PCS Initial screen is Tx mode.

1) Mode switch

Push the “#” Key.

(Sequentially switched “Tx mode→ TRx mode → Rx mode ”)

2) Channel Number setting

Push the “ * ” Key.

(Sequentially switched “25 → 600 → 1175 ”)

3) Quit

Push the “END” Key . (Exit FCC PCS Test Mode.)

(Display change the initial Screen, see page 2)

Push the “END” Key . (Exit FCC Test Mode.)

(Display change the initial Screen, see page 1)

[CDMA Mode]

1) Tx, TRx and Rx Mode

(Tx mode) : Tx power is Max, Tx activate only

(LCD Display)

<p>FCC CDMA</p> <p>Tx</p> <p>CH : 1013 ← (Channel Number)</p> <p>XX (Don't Care)</p> <p>XX (Don't Care)</p>
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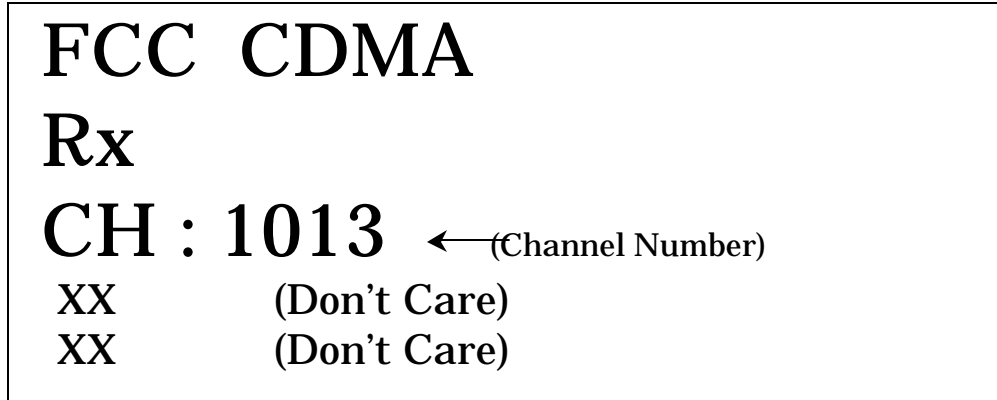
(Tx/Rx mode) : Tx power is estimate -13dBm, Tx/Rx activate

(LCD Display)

<p>FCC CDMA</p> <p>TRx</p> <p>CH : 1013 ← (Channel Number)</p> <p>XX (Don't Care)</p> <p>XX (Don't Care)</p>

(Rx Mode) : Tx power is off, Rx activate only

(LCD Display)



CDMA Initial screen is Tx mode.

4) Mode switch

Push the “#” Key.

(Sequentially switched “Tx mode→ TRx mode → Rx mode ”)

5) Channel Number setting

Push the “ * ” Key.

(Sequentially switched “1013 → 383 → 777 ”)

6) Quit

Push the “END” Key . (Exit FCC CDMA Test Mode.)

(Display change the initial Screen, see page 2)

Push the “END” Key . (Exit FCC Test Mode.)

(Display change the initial Screen, see page 1)

