

***SCP-8100/H.US Adjustment & Inspection Specifications for Mass production.***

<b>Model Code NO.</b>	<b>1-163-446-01</b>	
<b>Model NO.</b>	<b>SCP- 8100/H.US.MJ</b>	

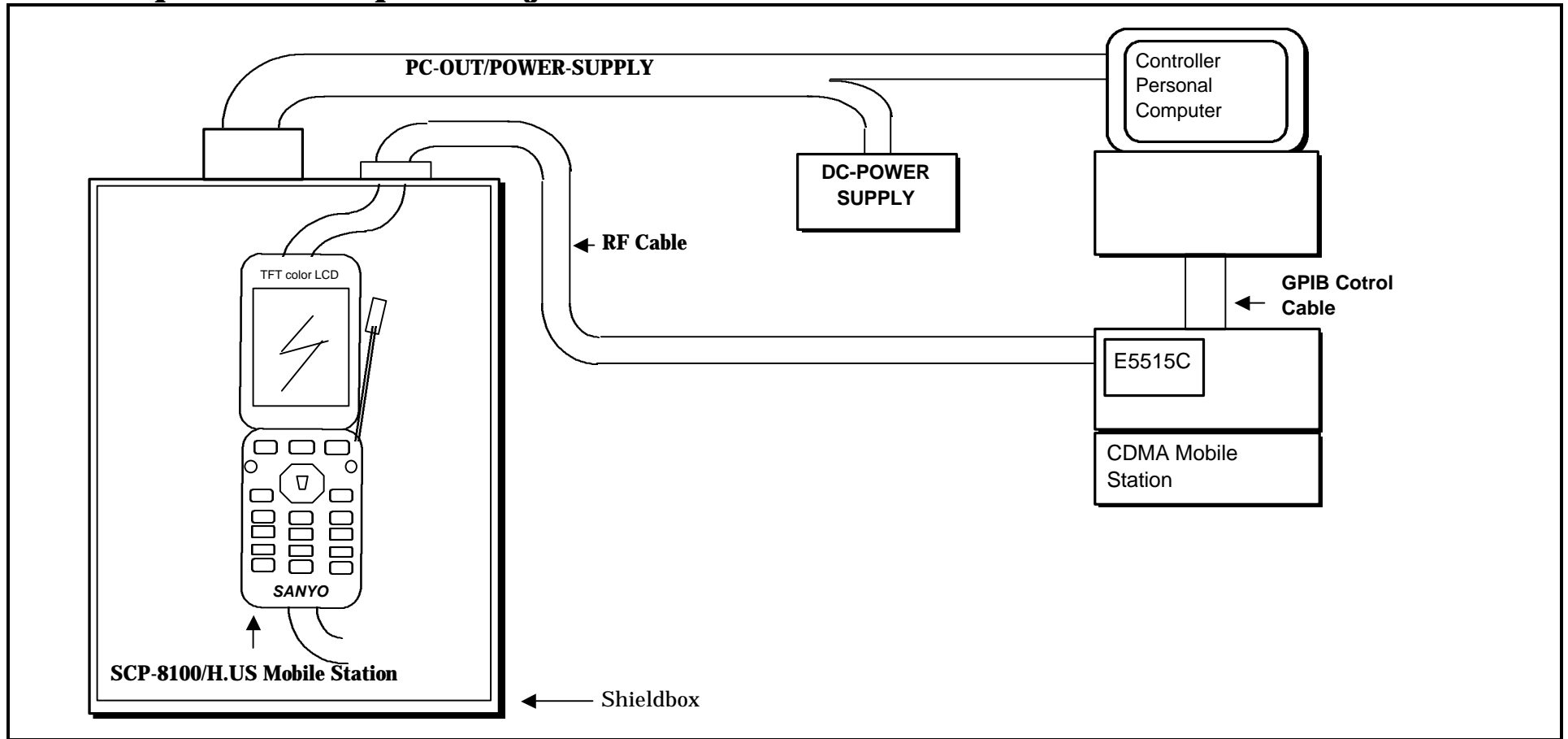
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<b>No.</b>	<b>Contents</b>
<b>1.</b>	<b>Set-Up for Tune-Up and Adjustment of Mobile Station</b>
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**Minor Change Version**

<b>NO.</b>	<b>Draw/Change History</b>	<b>Draw/Change Contents and Reason</b>

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



### 3.Adjustment Value

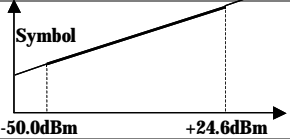
1.CELLULAR(AMPS) Adjustment					
ITEM	Sub-ITEM	Handset Setup(Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Tx-Power Adjustment	PL=0,1,2	Normal Test Mode	AMPS Mode	+23.9dBm	
	PL=3	Tx AGC SET : 3-2-3-2	Txpower :dBm Mode	+23.0dBm	
	PL=4			+19.0dBm	
	PL=5			+15.0dBm	
	PL=6			+11.0dBm	
	PL=7			+ 7.0dBm	
Tx-Power Frequency Adjustment	Bk 0=1017ch	FCC Test Mode	PL=0	+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		FCC Test Mode : AMPS Tx : ST,CH : 358	AF ANL Mode Detector : Pk±Max DE-EMPH:750us Fil1:>300Hz,Fil2:<15kHz pass	8.0KHz dev.	dev. 8.2kHz±0.1kHz ↓ NV_FM_FREQ_SENSE_GAIN_I
RSSI Adjustment	-60dBm In -113dBm In	FCC TEST Mode 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).

## 2.PCS(CDMA) RX Adjustment

ITEM	Sub-ITEM	Handset 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.PCS(CDMA) TX & TX-LIMIT Adjustment

ITEM	Sub-ITEM	Handset Setup(Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value	
Tx-RASRAM Adjustment  Adjusted by Low Power Mode & High Power Mode  &  Tx-Limit Adjustment  *Only for High Power Mode		Nomal Test Mode	PCS Ch=1163ch	+24.5dBm		
			SG level is cording to the transmission power level of MS	-50.0dBm		
			TOTAL:36Parametor			
						
		Table 1		PCS Ch=1163ch	+8.75dBm	
		Table 2			+10.1dBm	
		Table 3			+11.4dBm	
		Table 4			+12.7dBm	
		Table 5			+14.1dBm	
	Table 6			+15.4dBm		
	Table 7			+16.7dBm		
	Table 8			+18.1dBm		
	Table 9			+19.4dBm		
	Table 10			+20.7dBm		
	Table 11			+22.1dBm		
	Table 12			+23.4dBm		
	Table 13			+24.5dBm		
	Table 14			+24.5dBm		
	Table 15			+24.5dBm		
	Table 16			+24.5dBm		
	OFFSET	Offset : 16.7dB(Table 7)		+16.7dBm		
	SPN	Spn : 26.0dBm(Table 14)		+24.5dBm		

4.PCS(CDMA)Tx AGC Frequency Adjustment and Tx Limit Frequency Adjustment.					
TX AGC Frequency Adjustment Adjusted by Low Power Mode & High Power Mode	BK 0-14 *1 (ch)	Normal Test Mode	RF INPUT(SG) LV=Low:-63.5dBm	Tx-Pow diff.	
		Reference ch :1163ch	High:-92.0dBm		
		Difference of Center ch AGCsym.	Change to Channel 16 Time.		
		Change to Channel 16 Time.			
		12Symb=1.0dBm			
		Supplementary value:Difference of TX-power change to symb.			
	Bk15=1163ch				
HDET Frequency Adjustment	BK 0-14 *1 (ch)	Normal Test Mode	RF INPUT(SG) LV=HDET:-92dBm	Tx-Pow diff.	HDET diff.
		Reference ch :1163ch	Change to Channel 16 Time.		
		Difference of Center ch AGCsym.			
		Change to Channel 16 Time.			
		Difference of HDET			
	Bk15=1163ch				
TX Limit Frequency Adjustment	BK 0-14 *1 (ch)	Normal Test Mode	RF INPUT(SG) LV=-92.0dBm	*2	
		Reference ch :1163ch	Change to Channel 16 Time.		
		Difference of Center ch AGCsym.	W		
		Change to Channel 16 Time.			
		Supplementary value:Difference of HDET value change to AGC			
	Bk15=1175ch		*3		

\*1 BK 0-14:  
BK0=38,BK1=113,BK2=188,BK3=263,BK4=338,BK5=413,BK6=488,BK7=563,BK8=638,BK9=713,BK10=788,BK11=863,BK12=938,BK13=1013,BK14=1088  
\*2 TX-Power Diffrencial + ADC Diffrencial×Limit Table Value  
\*3 Limit table is made at 1163ch,and difference of value is put in here.

## 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	Normal Mode	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	Normal Mode	RF INPUT (SG) LV=-66.2dBm	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	

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			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk1=46Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk2=98Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk3=150Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk4=202Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk5=254Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk6=306Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk7=358Ch			Center CH	
	Bk8=410Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk9=462Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk10=514Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk11=566Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk12=618Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
	Bk13=670Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch
Bk14=722Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch	
Bk15=774Ch			OFFSET DIFF	LNA OFFSET FREQ:Difference From 358Ch	
LNA12OFFSET	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 toChanneles 16 Times		
	LNA12OFFSET FREQ				
	Bk0=1017Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk1=46Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk2=98Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk3=150Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk4=202Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk5=254Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk6=306Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk7=358Ch			Center CH	
	Bk8=410Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk9=462Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk10=514Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk11=566Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk12=618Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
	Bk13=670Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch
Bk14=722Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch	
Bk15=774Ch			OFFSET DIFF	LNA 12OFFSET FREQ:Difference From 358Ch	



## 7.CELLULAR(CDMA)TX&amp;TX-LIMIT Adjustment

ITEM	Sub-ITEM	Handset Setup (Internal Setup)	E5515C Setup	Adj. Value	Accuracy of NV-Value
Tx-RASRAM -> Adjustment		Nomal Test Mode	CDMA Ch=358ch	+23.9dBm	
			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				+23.9dBm	
Table12				+23.9dBm	
Table13				+23.9dBm	
Table14				+23.9dBm	
Table15				+23.9dBm	
Table16				+23.9dBm	
OFFSET		Offset : 18.4dBm(Table 6)			+19.7dBm
SPN	Spn : 26.4dBm (Table 12)			+23.9dBm	

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)	Normal Test Mode	RF INPUT(SG) LV=High:-89.0dBm		
		Reference ch: 358ch	RF INPUT(SG) LV=Low:-66.2dBm		
		Difference of Center ch AGCsym.			
		Change to Channels 16 Times.	Change to Channels 16 Times.		
				Tx-Pow diff.	TX_Comp vs FREQ
		HIGH POWER MODE			
		LOW POWER MODE			
		2 TIMES ADJUSTMENT			
HDET Frequency Adjustment	BK 0-15 *1 (ch)	Normal Test Mode	RF INPUT(SG) LV=-89.0dBm		
		Reference ch: 358ch			
		Difference of HDET	Change to Channels 16 Times.		
		Change to Channels 16 Times.		Hdet diff.	HDET_VS_FREQ
		Only HIGH POWER MODE			
TX Limit Frequency Adjustment	BK 0-15 *1 (ch)	Normal Test Mode	RF INPUT(SG) LV=-96.3dBm		
		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	IS98B Standard Spec	Measurement Spec	Measurement Condition	Measurement CH	Others
Tx-Frequency Err	TIA/EIA-98-B:3.1.2	< ±2.5ppm	< ±2.0ppm	Measurement Equipment Accuray < 0.1ppm	383	
Tx-Power Level(0,1,2)	TIA/EIA-98-B:3.2.1	24dBm to 30dBm (ERP)	22.5dBm to 23.9dBm (Conducted)	Measurement Equipment	991 / 383 / 799	
Tx-Power Level(3)	TIA/EIA-98-B:3.2.1	20dBm to 26dBm (ERP)	20.0dBm to 22.5dBm (Conducted)		383	
Tx-Power Level(4)	TIA/EIA-98-B:3.2.1	16dBm to 22dBm (ERP)	16.0dBm to 20.8dBm (Conducted)		383	
Tx-Power Level(5)	TIA/EIA-98-B:3.2.1	12dBm to 18dBm (ERP)	12.0dBm to 16.8dBm (Conducted)		383	
Tx-Power Level(6)	TIA/EIA-98-B:3.2.1	8dBm to 14dBm (ERP)	8.0dBm to 12.8dBm (Conducted)		383	
Tx-Power Level(7)	TIA/EIA-98-B:3.2.1	4dBm to 10dBm (ERP)	4.0dBm to 8.8dBm (Conducted)		383	
Deviation Limiting	TIA/EIA-98-B:3.3.2.3	< ±12Khz dev.	< ±12Khz dev.	Comp=ON,SAT=OFF HF Mode,Mic=6.3V IN	383	
Wideband Data	TIA/EIA-98-B:3.3.3	±8Khz dev. ± 10%	±8Khz dev. ± 10%	Wideband Mode	383	
SAT Level	TIA/EIA-98-B:3.3.4	±2Khz±0.2Khz dev.	±2Khz±0.2Khz dev.	SAT Mode	383	
ST Level	TIA/EIA-98-B:3.3.5	±8Khz dev. ± 10%	±8Khz dev. ± 10%	ST Mode	383	
Audio Distortion	TIA/EIA-98-B:2.2.2.5	< 5%	<5%	Voice Mode 8KHZdev -50dBm	383	
Audio Level		Medium High	50.0mV±3dB	2.9KdeV(1khz)	383	
SINAD	TIA/EIA-98-B:2.3.1	> 12dB	> 12dB	RF IN = -116.5dBm	991/799	
Antenna Effect			Reff.Set+/-3dB	Max Power Output	799	

2.Measurement Specification		PCS(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=4.1)		1%(0.010)	1%(0.010)	7200(TEST10)	25	
<i>Waveform Quality</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
RHO	4.3.4	>0.944	>0.944	14400bps	25	
Frequency Err Rate	4.1.1	±150Hz	±150Hz		25	
Time Offset	4.3.1	±1uS	±1uS		25	
<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	25	
Openloop Power Test2		-11±9.5(CLASS II)	-11±9.5(CLASS II)		25	
Openloop Power Test3		20±9.5(CLASS II)	20±9.5(CLASS II)		25	
<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	25	
Closedloop Max Power		>+24dB	>+24.5dB			
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	25	
<i>RTC Receiver Sensitivity</i>	TIA/EIA-98-D	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -106.8dBm	1175	
Receiver Sensitivity FER	3.5.1	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -106.0dBm	25	
<i>Single Tone Desens.</i>	TIA/EIA-98-D	1.0%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -101.0dBm		
Sensitivity FER	3.5.2			Undesired>-30dBm	600(-side)	
<i>TTC Max RF Output Pow</i>	TIA/EIA-98-D	23.0dBm~30.0dBm	22.8dBm~24.5dBm		25 / 600	
Max Power Output	4.4.5	(EIRP)	22.8dBm~24.5dBm (Conducted)		1175	
<i>TTC Conducted Spurious</i>	TIA/EIA-98-D			SCV Opt9(14400)		
>1.25MHz	4.5.1	< -42dBc(30KHZ)	< -46dBc(30KHZ)	Max Power Output	1175	
>1.98MHz		< -50dBc(30KHZ)	< -54dBc(30KHZ)	Max Power Output	1175	
>4.00MHz(30MHZ< f <1GHZ)		< -13dBm(100KHZ)	< -17dBm(100KHZ)	Max Power Output	1175	
>4.00MHz ( >1GHZ )		< -13dBm(1MHZ)	< -17dBm(1MHZ)	Max Power Output	1175	

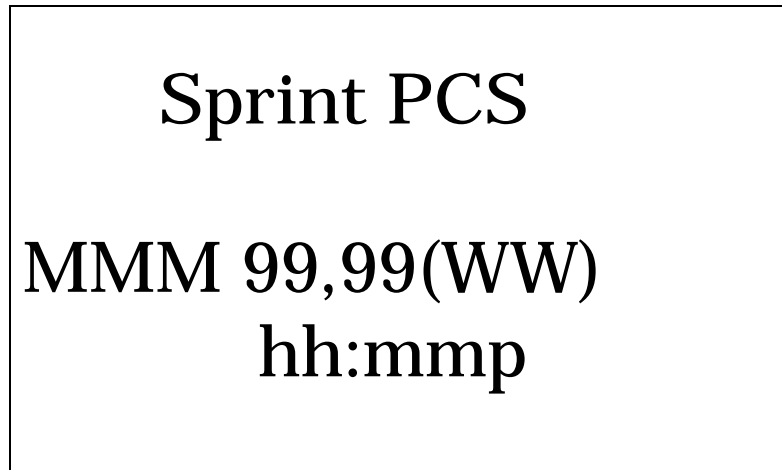
**3. Measurement Specification                      CELLULAR(CDMA)**

Measurement Item	Standard Item	IS98D Standard Spec	Measurement Spec	Measurement Condition	Measurement CH	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)	384	
<i>Waveform Quality</i>	TIA/EIA-98-D			Rateset2 SVC opt9		
RHO	4.3.4	>0.944	>0.944	14400bps	384	
Frequency Err Rate	4.1.1	±300Hz	±300Hz		384	
Time Offset	4.3.1	±1uS	±1uS		384	
<i>TTC Range of Openloop</i>	TIA/EIA-98-D	dBm	dBm	Rateset2 SVC opt9		
Openloop Power Test1	4.4.1	-48±9.5(CLASS III)	-48±9.5(CLASS III)	14400bps	384	
Openloop Power Test2		- 8±9.5(CLASS III)	- 8±9.5(CLASS III)		384	
Openloop Power Test3		20±9.5(CLASS III)	20±9.5(CLASS III)		384	
<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	1013	
<i>RTC Receiver Sensitivity</i>	TIA/EIA-98-D	0.5%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -105.3dBm	777	
Receiver Sensitivity FER	3.5.1	0.5%(Confidence95%)	1.0%(Confidence95%)		1013	
<i>Single Tone Desens.</i>	TIA/EIA-98-D	1.0%(Confidence95%)	1.0%(Confidence95%)	Rate2 Full -101.0dBm		
Sensitivity FER	3.5.2			Undesired>-30dBm	384(+side)	
<i>TTC Max RF Output Pow</i>	TIA/EIA-98-D	23.0dBm~30.0dBm	22.5dBm~23.9dBm		1013/777	
Max Power Output	4.4.5	(ERP)	(Conducted)			
<i>TTC Conducted Spurious</i>	TIA/EIA-98-D			SCV Opt9(14400)		
>885KHZ	H4.5.1	< -42dBc(30KHZ)	< -46dBc(30KHZ)	Max Power Output	1013	
>1.98MHz		< -54dBc(30KHZ)	< -58dBc(30KHZ)	Max Power Output	1013	
>4.00MHz(30MHZ< f <1GHZ)		< -13dBm(100KHZ)	< -17dBm(100KHZ)	Max Power Output	1013	
>4.00MHz ( >1GHZ )		< -13dBm(1MHZ)	< -17dBm(1MHZ)	Max Power Output	1013	

**FCC TEST MODE OPERATION MANUAL**

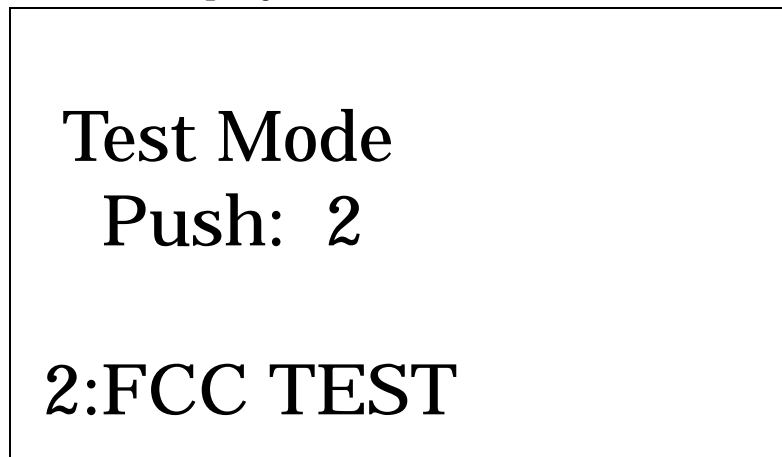
**[ FCC TEST Start Up ]**

- 1): Push the "POWER" Key.**  
(LCD Display)



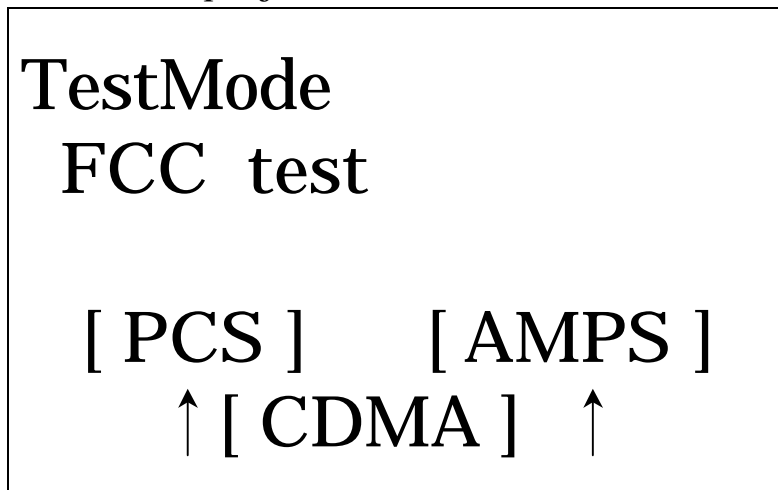
- 2): It transits to "Test\_Mode".**  
Push the "OK" Key and Push the " (left)" Key .

(LCD Display)






**3): Push the “2” Key, then entered the FCC TEST Mode.**


(LCD Display)



[PCS Inspection Mode] [AMPS Inspection Mode]


[CDMA Inspection Mode]

When the above screen, push either the “ (left)” Key or “ (down)” Key or the “ (right)” Key.

Push the “ (left)” Key, then switched PCS mode


(Displayed the Initial Screen of PCS Mode)

(The Initial Screen of PCS Mode is TX setting screen; See Page 7)

Push the “ (down)” Key, then switched CDMA Mode

(Displayed the Initial Screen of CDMA Mode)

(The Initial Screen of CDMA Mode is TX setting screen; See Page 9)

**Push the “  (right)” Key, then switched AMPS Mode**  
**(Displayed the Initial Screen of AMPS Mode)**  
**(The Initial Screen of AMPS Mode is RX setting screen; See Page 3)**



## [ **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 = 23.9 dBm**

**3 = 23.0 dBm**

**4 = 19.0 dBm**

**5 = 15.0 dBm**

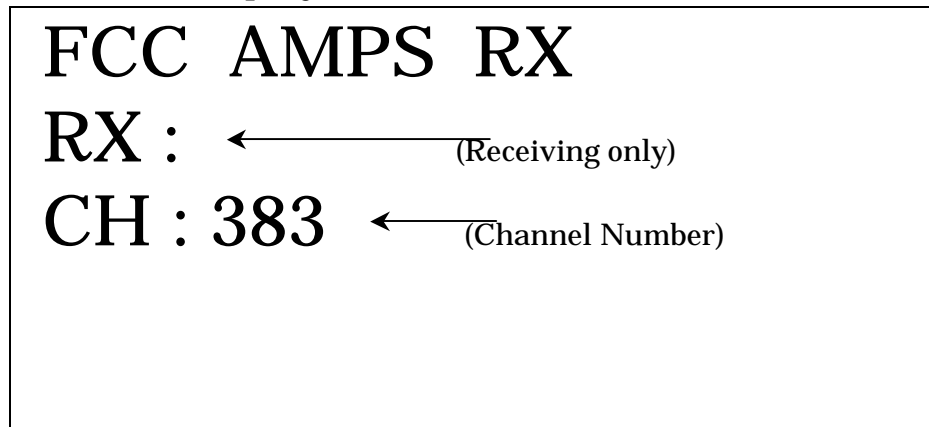
**6 = 11.0 dBm**

**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**

**TX : OFF**

**Mic : OFF**

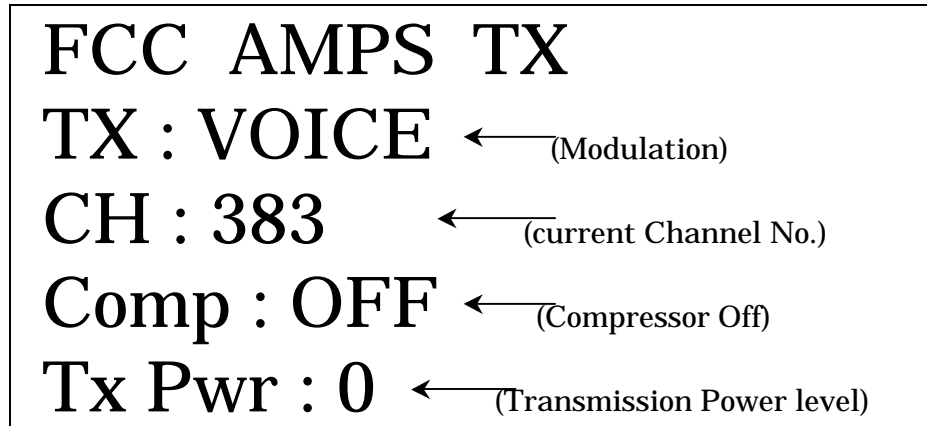
**RX : ON**

**Speaker : OFF**

**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 )

<b>No Modula</b>	: No Modulation
<b>VOICE</b>	: Mic ON, that is, activated Audio path.
<b>WBD</b>	: Activated Wide Band Data
<b>SAT</b>	: Output SAT
<b>ST</b>	: Output ST
<b>SAT+VOICE</b>	: Mic. ON, modulation signal is Voice added SAT.
<b>SAT+ST</b>	: The modulation signal is SAT added ST.
<b>SAT+DTMF</b>	: 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 compresor.

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

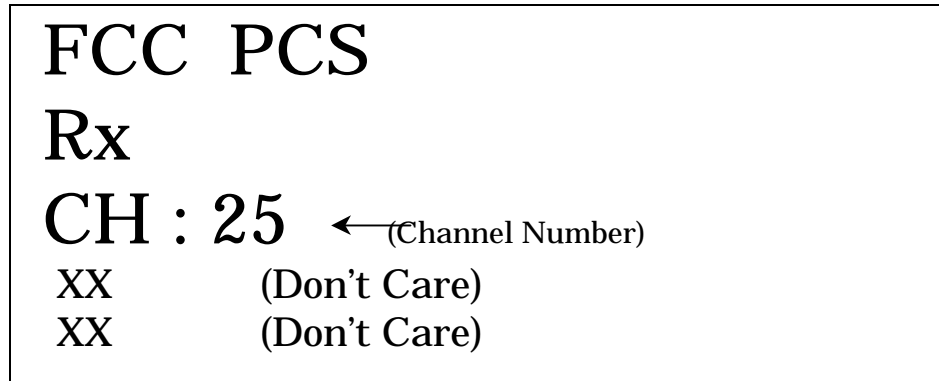
**( Tx/Rx mode ) : Tx power is estimate -13dBm, Tx/Rx activate**

(LCD Display)

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

**( 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><b>FCC CDMA</b> <b>Tx</b> <b>CH : 1013</b> ←(Channel Number) <b>XX</b> (Don't Care) <b>XX</b> (Don't Care)</p>
---

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

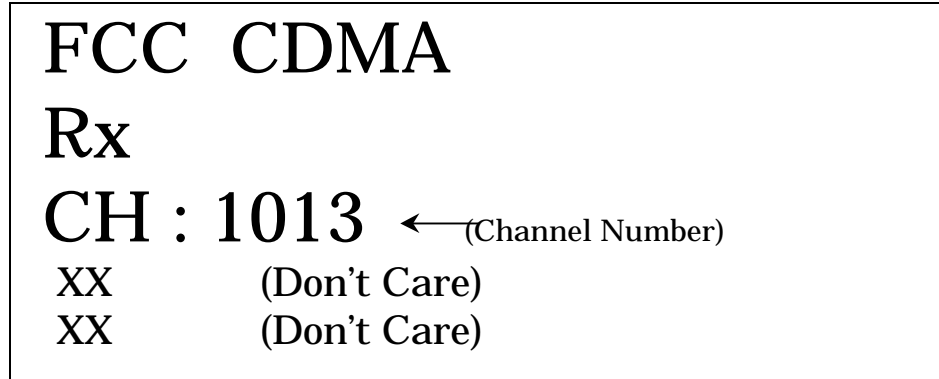
(LCD Display)

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

# AEZSCP-81H

