

14. Alignment procedures

ALIGNMENT PROCEDURES

INSTRUMENTS : VOLTMETER, SIGNAL GENERATOR, SPECTRUM ANALYZER, POWER METER,
LINEAR DETECTOR

STEP	ALIGN	DISPLAY	ENTRY OPERATION	ADJ. POINT MEASUREMENT POINT ADJ. VALUE
1		[MENU] [BOOK]	PWR	
2		MAIN MENU 1:Volume 2:Display 3:System	[MENU]	
3		SYSTEM 1:Select 2:Set NAM 3:Auto NAM	3	
4		Security Code:	0	
5		Security Code:*****	111111	
PA BIAS ALIGNMENT				
6	PA (IC425) BIAS VOLTAGE	1:CDMA Tx 2:CDMA Rx 3:CDMA TxRx 4:AMPS Tx	On this status	ADJ. Point : SVR401 Measurement point : S402 ADJ. Value : $-2.5 \pm 0.05V$ (see Figure 3-1)
CDMA ALIGNMENT				
7	CDMA TX POWER LEVEL	CDMA Tx Mode <1> - <6>	1	
		12)Tx AGC Enter <#>	2	
		12)Tx AGC PWR: dBm OFFSET: SLOPE:	#	Connect TEST CONECTOR to CS2 and SPECTRUM ANALYZER or POWER METER.
		12)Tx AGC Access OK	[Up] or [down]. [MENU]after adjust	ADJ. Value :+28dBm
			# [Up] or [down]. [MENU]after adjust	ADJ. Value :+23dBm
			:	
			# [Up] or [down]. [MENU]after adjust	ADJ. Value :-54dBm

		12)Tx AGC Enter <#>	END	
8	CDMA POWER vs. FREQ.	13)PWR(Freq) Enter <#>	3	
		13)PWR(Freq) Chan: Data:	#	Connect TEST CONECTOR to CS001 and SPECTRUM ANALYZER or POWER METER.
		13)PWR(Freq) Chan: 1023ch Data:	[Up] or [down]. [MENU]after adjust	ADJ. Value :+24dBm (1013ch : 824.70MHz)
			# [Up] or [down]. [MENU]after adjust	ADJ. Value :+24dBm (50ch : 826.50MHz)
			:	
			# [Up] or [down]. [MENU]after adjust	ADJ. Value :+24dBm (770ch : 848.10MHz)
		13)PWR(Freq) Enter <#>	END	
9	CDMA Max Power Limit	14)PWR(Temp) Enter <#>	4	
		14)PWR(Temp) Data:	#	Connect TEST CONECTOR to CS001 and SPECTRUM ANALYZER or POWER METER.
		14)PWR(Temp) Access OK	[Up] or [down]. [MENU]after adjust.	ADJ. Value :+24dBm
		1:CDMA Tx 2:CDMA Rx 3:CDMA TxRx 4:AMPS Tx	END END	
10	CDMA RX Level	CDMA Rx Mode <1> - <5>	2	
		22)Rx AGC Enter <#>	2	
		22)Rx AGC SG: SLOPE: RSSI:	#	

		2)Rx AGC Access OK	[Up] or [down]. [MENU]after adjust	Connect TEST CONNECTOR to CS001 and SIGNAL GENERATOR (881.49MHz, CW, -106dBm)
			# [Up] or [down]. [MENU]after adjust	Connect TEST CONNECTOR to CS001 and SIGNAL GENERATOR (881.49MHz, CW, -100dBm)
			:	
			# [Up] or [down]. [MENU]after adjust	Connect TEST CONNECTOR to CS001 and SIGNAL GENERATOR (881.49MHz, CW, -21dBm)
		1:CDMA Tx 2:CDMA Rx 3:CDMA TxRx 4:AMPS Tx	END END	
AMPS ALIGNMENT				
11	AMPS RX LEVEL	AMPS Rx Mode <1> - <3>	5	
		Rx TEST ENTER NUM 1 - 3	2	
		52)RSSI Set Enter <#>	#	
		52)RSSI Set RSSI: dBm		Connect TEST CONNECTOR to CS001 and SIGNAL GENERATOR (881.49MHz, CW, -75dBm).
		52)RSSI Set Access OK	[MENU]	
		1:CDMA Tx 2:CDMA Rx 3:CDMA TxRx 4:AMPS Tx	END END	
12	AMPS TX POWER LEVEL(1)	AMPS Tx Mode <1> - <9>	4	
		43)Pwr (PDM1) Enter <#>	3	
		43)Pwr (PDM1) Power Lv. Monitor: PDM/AGC:	#	Connect TEST CONECTOR to CS001 and SPECTRUM ANALYZER or POWER METER.

	Level 0	43)Pwr(PDM1) Power Lv.0 Monitor: PDM/AGC:	0 [Up] or [down]. [MENU]after adjust	ADJ. Value :+26.3dBm
	Level 3	43)Pwr(PDM1) Power Lv.3 Monitor: PDM/AGC:	3 [Up] or [down]. [MENU]after adjust	ADJ. Value :+24dBm
	Level 4	43)Pwr(PDM1) Power Lv.4 Monitor: PDM/AGC:	4 [Up] or [down]. [MENU]after adjust	ADJ. Value :+20dBm
	Level 5	43)Pwr(PDM1) Power Lv.5 Monitor: PDM/AGC:	5 [Up] or [down]. [MENU]after adjust	ADJ. Value :+16dBm
	Level 6	43)Pwr(PDM1) Power Lv.6 Monitor: PDM/AGC:	6 [Up] or [down]. [MENU]after adjust	ADJ. Value :+12dBm
	Level 7	43)Pwr(PDM1) Power Lv.7 Monitor: PDM/AGC:	7 [Up] or [down]. [MENU]after adjust	ADJ. Value :+8dBm
		43)Pwr(PDM1) Enter <#>	END	
13	AMPS TX POWER LEVEL(2)	44)Pwr(AGC) Enter <#>	4	
		44)Pwr(AGC) Level: Power: Monitor:	#	Connect TEST CONECTOR to CS001 and SPECTRUM ANALYZER or POWER METER.
	Level 0	44)Pwr(AGC) Level:0 Power: Monitor:	0 [Up] or [down]. [MENU]after adjust	ADJ. Value :+26.3dBm
	Level 3	44)Pwr(AGC) Level:3 Power: Monitor:	3 [Up] or [down]. [MENU]after adjust	ADJ. Value :+24dBm
	Level 4	44)Pwr(AGC) Level:4 Power: Monitor:	4 [Up] or [down]. [MENU]after adjust	ADJ. Value :+20dBm

	Level 5	44)Pwr(AGC) Level:5 Power: Monitor:	5 [Up] or [down]. [MENU]after adjust	ADJ. Value :+16dBm
	Level 6	44)Pwr(AGC) Level:6 Power: Monitor:	6 [Up] or [down]. [MENU]after adjust	ADJ. Value :+12dBm
	Level 7	44)Pwr(AGC) Level:7 Power: Monitor:	7 [Up] or [down]. [MENU]after adjust	ADJ. Value :+8dBm
		44)Pwr(AGC) Enter <#>	END	
14	AMPS ST LEVEL	45)ST Level Enter <#>	5	
		45)ST Level Level:	#	Connect TEST CONNECTOR to CS001 and LINEAR DETECTOR
		45)ST Level Access OK	[Up] or [down]. [MENU]after adjust	ADJ. Value : ± 7.7 kHz Dev.
		45)ST Level Enter <#>	END	
15	AMPS SAT LEVEL	46)SAT Level Enter <#>	6	
		46)SAT Level Level:	#	Connect TEST CONNECTOR to CS001 and LINEAR DETECTOR
		46)SAT Level Access OK	[Up] or [down]. [MENU]after adjust	ADJ. Value : ± 2.0 kHz Dev.
		46)SAT Level Enter <#>	END	
16	AMPS DTMF LEVEL	47)DTMF Lv. Enter <#>	7	
		47)DTMF Lv. Level:	#	Connect TEST CONNECTOR to CS001 and LINEAR DETECTOR
		47)DTMF Lv. Access OK	[Up] or [down]. [MENU]after adjust	ADJ. Value : ± 10.2 kHz Dev.

		47)DTMF Lv. Enter <#>	END	
17	AMPS DEVIATION LIMIT	49)Tx Mute Enter <#>	9	
		49)Tx Mute ON = 1 OFF = 0	#	
		49)Tx Mute ON = 1 OFF = 0	0	Tx UnMute
		49)Tx Mute Enter <#>	END	
		48)Deviation Enter <#>	8	
		48)Deviation Level:	#	Connect TEST CONNECTOR to CS001 and LINEAR DETECTOR
		48)Deviation Access OK	[Up] or [down]. [MENU]after adjust	ADJ. Value : ±10.9kHz Dev.
		1:CDMA Tx 2:CDMA Rx 3:CDMA TxRx 4:AMPS Tx	END END	