# TURN UP INFORMATION

# INTRUMENT:

Standard Signal Generator(SSG) 1set

Digital Voltmeter 1set Power Meter 1set Frequency counter 1set Distortion meter 1set Spectrum analyzer 1set Oscilloscope 1set Audio Generator (AG) 1set AF Volt Meter 1set Tracking Generator 1set  $8\,\Omega$  Dummy Load 1set Regulated power supply 1set Ammeter 1set Deviation Meter 1set

# Adjustment:

Some items can be adjusted in conventional mode and the others in manual mode Turn the power on to enter conventional mode.

## Common Section

	Condition	Measurement		Adjustment		
Item		Test Instrument	Terminal	Part	Method	Specification/Remarks
1. Setting	1) BATT Terminal Voltage : 7.2V					
	2) SSG standard Modulation					
	[WIDE]MOD:1kHz,DEV:3kHz					
	[NARROW]MOD:1kHz,DEV:1.5kHz					
2. VCO Lock	1)CH : HI	Power Meter	ANT CV	TC2	3.6 V	±0.1V
voltage RX	2)CH : LO	DVM			СНЕСК	≥0.9V
3. VCO Lock	3)CH : HI PTT : ON			TC1	3.8 V	±0.1V
voltage TX	4) CH : LO PTT : ON				СНЕСК	≥0.7V

# **Transmitter Section:**

Item	Condition	Measure	ment	Adju	stment	
		Test Instrument	Terminal	Test Instrument	Terminal	Measurement
1. Frequency Adjustment	1) CH: HI 2) PTT: ON	Frequency counter	ANT	VR1	469.975MHz	±50Hz

2. High	TEST CH: LO	Power		Programming		3.7W(Conducted)
Power	Center	Meter		software:		≤1.6A
Adjust	HI	Ammeter		U10		
	(3 POINT)					
	BATT Voltage: 7.2V					
	PTT : ON					
3. Low						
Power						
Adjust(N/A)						
	BATT terminal Voltage :7.2V PTT : ON					
4. Max	TEST CH: Center	Power meter	ANT		4.6kHz	
deviation	AG: 1kHz / 120mV	Deviation	SP /		(According to t	h+50Hz
adjust	Deviation meter filter LPF :	meter	MIC		lager+,-)	Error: 3.8~4.8KHz
[ wide ]	15kHz HPF : OFF	Oscilloscope	connecto		2 ,,	LAIGH 5.0 1.01112
	PTT:ON	AG	r			
[ narrow]	TEST CH : Center	AF VTVM			2.3kHz	±50Hz
[	PTT : ON				(According to t	
					lager+,-)	
DQT	TEST CH; LO	Power meter	ANT	Programming	Make the	
5 Balance	MID	Deviation	AINI	software :	demodulation	
. adjust	HI	meter		U10	wave into	
[ wide	(3 POINT)	Oscilloscope			square waves	
	LPF: 3kHz	AG				
	HPF: OFF	AF VTVM				
	PTT: ON					
[ narrow ]	TEST CH : Center					
	PTT : ON					
6.	TEST CH: LO	Power meter	ANT	Programming		
QT deviation	MID	Deviation		software :		
adjust	HI	meter		U10		
[wide]	(3 POINT)	Oscilloscope			0. 75kHz	±100Hz
	LPF: 3kHz	AG				
	HPF: OFF	AF VTVM				
	PTT : ON					
[ narrow ]	TEST CH : Center				0. 35kHz	$\pm$ 100Hz
	PTT: ON					
7. DQT	TEST CH : Center					±100Hz
deviation	Low					
adjust	High					
	(3 points)				0. 75kHz	
	LPF: 3kHz				O. TORTIZ	
	HPF : OFF					
	PTT: ON					
[ narrow ]	TEST CH : Center				0. 35kHz	±100Hz
[ narrow ]					U. UUNIIZ	<u></u> 100112
	PTT: ON					

# Receiver Section

T	Constitue	Measurement		Adjustment		
Item	Condition	Test Instrument	Termi	Part	Method	Specification/Remarks
l. BPF Wave adjust	(1)Center frequency Spectrum analyzer setting Center-f: 440.125MHz Span : 50MHz RBW : 300kHz VBW : 10kHz ATT : 5dB (2)High-edge frequency Spectrum analyzer setting Center-f: 469.975 MHz (3)Low-edge frequency Spectrum analyzer setting Center-f: 406.125 MHz	Spectrum analyzer	AN <sup>T</sup> T BPF	Programming software : U10	Adjust the waveform as shown to the right	### 173 (Aller
2 Sensitivity [ wide ]	TEST CH: LOW Center High SSG output: -I19dBm (0.3µV) SSG MOD: 3.0kHz	SSG DVM Oscilloscope AF VTVM	ANT		check	12dB SINAD or more
[ narrow]	TEST CH : Center SSG output : -117 dBm (0.4µV) SSG MOD : 1.5kHz					
3 SQL1 (Threshold) writing [ wide ]	TEST CH : Center LOW High SSG output : -123 dBm (0.16μV) SSG MOD : 3.0kHz			Programming software U10	write	Squelch open Error: ± 1.5dB
[narrow]	TEST CH : Center SSG OUTPUT : -122 dBm (0.18μV)					
4 SQL9	TEST CH : Center					
(Tight	Low					
writing	High					
[ wide ]	SSG output : -117 dBm (0.3μV)					
[ narrow ]	TEST CH : Center					
	SSG output : -116 dBm $(0.35\mu V)$					
5. BATT	BATT Terminal voltage : 5.6V	DVM	ANT		writing	BATT Terminal voltage
Detection			BATT			5.6V
Writing			termin			
			al			