

ADJUSTMENT PROCEDURES

1-1 PREPARATION

REQUIRED TEST EQUIPMENT

Equipment	Grade and Range	Equipment	Grade and Range
DC power supply	Output voltage: 13.8V DC Current capacity: 4A or more	Standard signal generator(SSG)	Frequency range: 0.1-150MHz Output level: 0.1uV-100mV
External speaker	Input impedance: 8Ω Capacity: 10W or more	DC voltmeter	Input impedance: 50kΩ/V DC or better
Frequency counter	Frequency range : 0.1–100MHz Frequency accuracy : ±1 ppm or better Sensitivity : 100 mV or better	RF power meter (terminated type)	Measuring range : 1–10 W Frequency range : 2–50MHz Impedance : 50Ω SWR : Less than 1.2 : 1
Distortion meter	Frequency range: 1KHz+/-10% Measuring range: 1-100%	SINAD Meter	Frequency range: 1KHZ+/-5Hz Optional Frequency Range: 300 Hz to 10 kHz ±5% Input Level Range: 100mV to 15V Display Range: 0 to 60 dB

1-2 PLL ADJUSTMENTS

Adjustment	Adjustment condition	Measurement		Value	Adjustment point	
		Unit	Location		Unit	Adjust
Lock Voltage	<ul style="list-style-type: none"> ● Operation channel: CH 19 	Main	Connect a digital multi-meter or oscilloscope to Resistor R68	3.0V – 3.8V	Main	T4
Reference frequency	<ul style="list-style-type: none"> ● Operation channel: CH 19 ● Connect an RF power meter or a 50 Ω dummy load to the antenna connector. ● Transmitting 	Main	Loosely couple the frequency counter to the antenna connector.	27.185MHz	Main	Vc1

1-3TRANSMITTER ADJUSTMENTS

Adjustment	Adjustment condition	Measurement		Value	Adjustment point	
		Unit	Location		Unit	Adjust
Output power	<ul style="list-style-type: none"> ● Operation channel: CH 19 ● Transmitting 	Main	Connect an RF power meter to the antenna connector.	3.8-4.3W	Main	T5 T6 L16

1-4 RECEIVER ADJUSTMENTS

Adjustment	Adjustment condition	Measurement		Value	Adjustment point	
		Unit	Location		Unit	Adjust
Sensitivity	<ul style="list-style-type: none"> ● Operation channel: CH 19 ● Connect a Standard signal generator's output to the antenna connector and set as: Level: 1.0uV* ● Receiving 	Main	Connect a External speaker and a sinad meter to EXT.	Maximum sensitivity	Main	T1 T2 T3 L102 L104