

# ADJUSTMENT

## 1) Required Test Equipment

### 1. Regulated Power Supply

Supply voltage: DC13.8V  
Current: 3A or more

### 2. Digital Multimeter

Voltage range: FS = 20V or so  
Input resistance: High Impedance

### 3. Oscilloscope

Measurable frequency: Audio Frequency

### 4. Audio Dummy Load

Impedance:  $8\Omega$   
Dissipation: 1W or more  
Jack: 3.5 $\phi$

### 5. SSG

Output frequency: 1GHz or more  
Output level: -20dB/0.1 $\mu$ V to 120dB/1V  
Moduration: AM/FM

### 6. Spectrum Analyzer

Measuring range: Up to 2GHz or more

### 7. Power Meter

Measurable frequency: Up to 500MHz  
Impedance:  $50\Omega$ , unbalanced  
Measuring range: ~10W

### 8. Audio Voltmeter

Measurable frequency: ~100kHz  
Sensitivity: 1mV ~ 10V

### 9. Audio Generator

Output frequency: 67Hz~10kHz  
Output impedance:  $600\Omega$ , unbalanced

### 10. Distortion Meter/SINAD Meter

Measurable frequency: 1kHz  
Input level: Up to 40dB  
Distortion level: 1% ~100%

### 11. Frequency Counter

Measurable frequency: Up to 500MHz  
Measurements stability: +/-0.1 ppm or so

### 12. Linear Detector

Measurable frequency: Up to 500MHz  
Characteristics: Flat  
CN: 60dB or more

### Note

1. Standard Modulation: 1kHz +/- 3.5kHz/DEV
2. Reference Sensitivity: 12dB SINAD
3. Attach the fuse to the RF test equipment.
4. All SSG output is indicated by EMF.

## 2) Adjustment for DJ-G5T/E

Item	Condition	Measurement			Adjustment			Specifications
		TX/RX	Equipment	Unit	Unit	Parts	Method	
Reference Voltage	L band f=145.05MHz	RX	Digital Multimeter	V-VCO P/D	V-VCO	L701	3.7V	3.7V+/-0.1V
	R band f=435.05MHz	RX	Digital Multimeter	U-VCO P/D	U-VCO	L601	1.2V	1.2V+/-0.1V
Reference Frequency	R band f=435.05MHz (E) f=445.05MHz (T)	TX Low	Freq. Counter Power Meter		RF	VC51	435.05MHz (E) 445.05MHz (T)	+/- 50Hz
Sensitivity	L band f=144.95MHz SSG out: -10dB $\mu$	RX	SSG Dist. Meter		RF	L81 L82	Turn the coils to the max.	SINAD is 12dB or more.
S Meter	L band f=144.95MHz Mod: 3.5kHz/dev SSG out: 3dB $\mu$	RX	SSG	S Meter	IF	VR304	3 digits should be turned ON.	
	R band f=434.95MHz Mod: 3.5kHz/dev SSG out: 3dB $\mu$					VR302	3 digits should be turned ON.	
Hi Power 13.8V DC	f=435.05MHz (E) f=445.05MHz (T)	TX High	Power Meter		RF	VR51	5.0W	5.0W+/-0.1W
Mid Power		TX Mid		VR52		1.0W	1.0W+/-0.1W	
Low Power		TX Low				Check	100~400mW	
High Power 13.8V DC	f=145.05MHz	TX High	Power Meter		RF	VR53	5.0W	5.0W+/-0.1W
Mid Power		TX Mid		VR54		1.0W	1.0W+/-0.1W	
Low Power		TX Low				Check	100~400mW	
Deviation	f=435.05MHz (E) f=445.05MHz (T) Mod: 1kHz, 50mV	TX Low	Linear Det. Oscilloscope Power Meter		IF	VR306	4.5kHz/DEV	4.5kHz +/-0.1kHz/DEV
	f=145.05MHz Mod: 1kHz, 50mV			VR305		4.5kHz/DEV	4.5kHz +/-0.1kHz/DEV	
DTMF	f=145.05MHz Push "1" key			VR308		3.1kHz/DEV	3.1kHz +/-0.1kHz/DEV	
Subaudible Tone	f=145.05MHz 88.5Hz			VR307		800Hz/DEV	800Hz +/-50Hz/DEV	
Tone Burst	f=145.05MHz Push "PTT2" key			VR309		3.0kHz/DEV	3.0kHz +/-0.1kHz/DEV	

### 3) Adjustment Points

