

■ ADJUSTMENT (DJ-560T/E)

■ VHF

Item	Adjustment point(s)	Adjustment method
VCO Voltage	L2 (VCO Board)	Receive at 145.00MHz, then adjust L2 on VVCO board so that the voltage of TP2 on RF board is 1.9V.
Output Power	*Hi Power VR2 (RF Board)	Transmit at 144.95MHz, then adjust VR2 on RF board so that the output power is 3.2W.
	^Low Power Verification only	Transmit at 144.95MHz on the Low power, then verify that the output power is 0.1W to 1W.
Deviation	VR4 (RF Board)	Transmit at 144.95MHz and enter the microphone input of -26dBm . then adjust VR4 on RF board so that the deviation is 4.2kHz.
	Verification only	Enter the microphone input of $-45\text{dBm}/1\text{kHz}$, then verify that the deviation is $3.5\text{kHz} \pm 0.5\text{kHz}$.
Signal to Noise Ratio	Verification only	Enter the microphone input of $3.5\text{kHz}/\text{dev}/1\text{kHz}$, then verify that transmit S/N is 35dB or over.
DTMF Deviation	Verification only	Turn off the modulation output power of the signal generator and at 144.95MHz press the key pad 1, then verify the deviation is $3.1\text{kHz} \pm 0.4\text{kHz}$.
Subaudible Tone Deviation (T, TW)	VR9 (IF Board)	Turn off the modulation output power of the signal generator at 144.95MHz, transmit 88.5Hz tone, then adjust VR9 on IF board so that the deviation is 800kHz.
1.750kHz Tone Deviation (E)	VR9 (IF Board)	Turn off the modulation output power of the signal generator and at 144.95MHz, pressing the Tone Burst Switch on Switch board, transmit then adjust VR9 on IF board so that the deviation is 3.5kHz.
Transmitting Range	Verification only	On Hi power, transmit at the following frequencies and verify the output power as follows: 0.1W or over at 135.00MHz 0.1W or over at 169.99MHz.
Detection Coil	L4 (IF Board)	At 145.03MHz, enter $+66\text{dB}\mu/1\text{kHz}/3.5\text{kHzDev}$ of signal generator, then adjust L4 on IF board so that the detection output power is at its maximum.
Front End	L22, L24, L25, L26, L27, L28 (RF Board)	At 145.03MHz, adjust L22, L24, L25, L26, L27, and L28 so that 12dB SINAD sensitivity is at its maximum.
S meter	VR5 (IF Board)	At 145.03MHz, enter a signal of $+10\text{dB}$ of signal generator, then adjust VR5 on IF board so that FULL in the S meter starts lighting.
Total Distortion	Verification only	At 145.03MHz enter a signal of $+66\text{dB}\mu/1\text{kHz}/3.5\text{kHzDev}$ of signal generator, then verify that the distortion at 0dBm output is 5% or under.
Total Signal to Noise Ratio	Verification only	At 145.03MHz, enter a signal of $+66\text{dB}\mu/1\text{kHz}/3.5\text{kHzDev}$ of signal generator, then verify that the S/N is 35dB or over.
Squelch	Verification only	1. Turn off the output power of signal generator and rotating the squelch knob of VHF, verify that the noise disappears at the position between 8:30 and 12 o'clock of the knob. 2. Turn the squelch knob until the noise just disappears, then verify that squelch will open at 145.03MHz and -10dB . 3. Rotate the squelch knob fully clockwise, then changing the output power of signal generator, verify that the squelch will open at $-8 - +2\text{dB}$.
Receiving Range	Verification only	Enter a signal of $+66\text{dB}\mu/1\text{kHz}/3.5\text{kHzDev}$ of signal generator, then verify that the unit can receive at 130.00MHz and 169.00MHz.
Transmitting Spurious	Verification only	At 144.95MHz, verify that the transmit spurious is -60dBc or under on Hi power and -50dBc or under on Low power.

■ UHF

Item	Adjustment point(s)	Adjustment method
VCO Voltage	L5 (U-VCO Board)	1. Transmit at 430.00MHz(E) or 440.00MHz(T, TW) on Low power, then adjust L5 on U-VCO board so that the voltage of TP1 on U-VCO board is 0.6 — 1.0V(E) or 0.9 — 1.1V(T, TW).
	L2 (U-VCO Board)	2. Receive at 430.00MHz(E) or 440.00MHz(T, TW), then adjust L2 on U-VCO board so that the voltage of TP1 is 0.2 — 0.3V(E) or 1.0V(T, TW).
Basic Frequency	TC4 (RF Board)	Select UHF as the main band and transmit at 434.95MHz(E) or 444.95MHz(T, TW), then adjust TC4 on RF board so that the frequency is 434.95MHz + 50Hz(E) or 444.95MHz + 50Hz(T, TW).
Output Power	*Hi Power VR1 (RF Board)	Transmit at 434.95MHz(E) or 444.95MHz(T, TW), then adjust VR1 on RF board so that the output power is 3.2W. Verify that RF meter is full.
	*Low Power Verification only	Transmit at 434.95MHz(E) or 444.95MHz(T, TW) on Low Power, then verify the output power is 0.1 — 1W. Verify that 5 in the RF meter lights up.
Deviation	VR3 (RF Board)	Transmit at 434.95MHz(E) or 444.95MHz(T, TW) and enter the microphone input of -26dBm/1kHz, then adjust VR3 on RF board so that the deviation is 4.2kHz.
	Verification only	Enter the microphone input of -45dBm/1kHz, then verify the deviation is 3.5kHz ± 0.5kHz.
Signal to Noise Ratio	Verification only	Enter the microphone input of 3.5kHz/dev/1kHz, then verify that transmit signal noise is 35dB or over.
DTMF Deviation	VR8 (IF Board)	Turn off the modulation output of the signal generator and transmitting at 434.95MHz(E) or 444.95MHz(T, TW) and press the key pad 1, then adjust VR8 on IF board so that the deviation 3.1kHz.
Subaudible Tone Deviation (T, TW)	VR7 (IF Board)	Turn off the modulation output of the signal generator and transmit a tone of 88.5Hz, then adjust VR7 on IF board so that the deviation is 800Hz.
1.750Hz Tone Deviation (E)	VR7 (IF Board)	Turn off the modulation output of the signal generator and at 434.95MHz, press the tone burst switch on Switch board to transmit, then adjust VR7 on IF board so that the deviation is 3.5kHz.
Transmitting Range	Verification only	On Hi power, transmit at the following frequencies and verify the output power as follows; 2.3W or over at 428.00MHz 2.3W or over at 440.00MHz 0.1W or over at 465.00MHz
Detection Coil	L2 (IF Board)	At 435.03MHz(E) or 445.03MHz(T, TW), enter +66dB μ 1kHz/3.5kHzDev of signal generator, then adjust L2 on IF board so that the detection output power is at its maximum.
Front End	TC5, TC6, TC7, L3, L4, L5 (RF Board)	At 435.03MHz(E) or 445.03MHz(T, TW), adjust TC5, TC6, TC7, L3, L4, and L5 on RF board so that 12dB SINAD sensitivity is at its maximum.
S meter	VR2 (IF Board)	At 435.03MHz(E) or 445.03MHz(T, TW), enter a signal of +13dB of signal generator, then adjust VR2 on IF board so that FULL in the S meter starts lighting.
Total Distortion	Verification only	At 435.03MHz(E) or 445.03MHz(T, TW), enter a signal of +66dB μ 1kHz/3.5kHzDev of signal generator, then verify that the distortion ratio is 5% or less at 0dBm.
Total Signal to Noise Ratio	Verification only	At 435.03MHz(E) or 445.03MHz(T, TW), enter a signal of +66dB μ 1kHz/3.5kHzDev of signal generator, then verify that the S/N is 35dB or over.
Maximum Output Power	Verification only	At 435.03MHz(E) or 445.03MHz(T, TW), enter a signal of +66dB μ 1kHz/3.5kHzDev of signal generator, then verify that the output power is 4dBm(190mW) or over.
Squelch	Verification only	1. Turn off the output power of signal generator and rotating squelch knob of UHF, verify that the noise disappears at the position between 8:30 and 12 o'clock of the knob. 2. Turn the squelch knob until the noise just disappears, then verify that squelch will open at 435.03MHz(E) or 445.03MHz(T, TW) and -10dB of signal generator. 3. Rotate squelch knob fully clockwise, then changing the output power of signal generator, verify that the squelch will open at -6dB ± 4dB.
Receiving Range	Verification only	Enter a signal of +66dB μ 1kHz/3.5kHzDev of signal generator, then verify that the unit can receive at 428.00MHz and 469.99MHz.
Transmitting Spurious		At 434.95MHz, 429.95MHz, and 439.95MHz(E) or 444.95MHz, 439.95MHz, and 449.95MHz(T, TW), verify that the transmitting spurious is -60dBc or under on Hi power and -50dBc or under on Low power.