

■ 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 -45dBm/1kHz, then verify that 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 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 3.1kHz ± 0.4kHz. |
| 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 +66dB μ /1kHz/3.5kHzDev 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 +10dB 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 +66dB μ /1kHz/3.5kHzDev 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 +66dB μ /1kHz/3.5kHzDev 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 — +2dB. |
| Receiving Range | Verification only | Enter a signal of +66dB μ /1kHz/3.5kHzDev 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. |