IC-M1V ADJUSTMENT PROCEDURES

5-1 PLL AND TRANSMITTER ADJUSTMENTS

Select an operating using [↑] / [↓] keys, then set specified value using [←] / [→] keys on the connected computer keyboard.

ADJUSTMENT		ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT
			UNIT	LOCATION		
PLL LOCK VOLTAGE	1	• Operating channel : ch 16 • Receiving • Push “Reload” bottun on the adjustment program.		Use the adjustment program.	2.3–3.3 V	Verify
	2	• Operating channel : ch 16 • Connect the RF power meter or 50 Ω dummy load to the antenna connector. • Transmitting • Push “Reload” bottun on the adjustment program.		Use the adjustment program.	2.3–3.3 V	Verify
PLL REFERENCE FREQUENCY	1	• Operating channel : ch 16 • Connect the RF power meter or 50 Ω dummy load to the antenna connector. • Transmitting • Push “Reload” bottun on the adjustment program.	Top panel	Loosely couple the frequnecy counter to the antenna connector.	156.800000 MHz	Use the adjustment program.
OUTPUT POWER	1	• Operating channel : ch 16 • [H/L] switch : High • Transmitting • Push “Reload” bottun on the adjustment program.	Top panel	Connect the RF power meter to the antenna connector.	5.0 W	Use the adjustment program.
	2	• [H/L] switch : Low • Transmitting • Push “Reload” bottun on the adjustment program.			1.0 W	Use the adjustment program.
	3	• [H/L] switch : Extra low • Transmitting • Push “Reload” bottun on the adjustment program.			0.5 W	Use the adjustment program.
FM DEVIATION	1	• Operating channel : ch 16 • [H/L] switch : High • Connect the audio generator to the [MIC] jack and set as: 1.0 kHz/40 mV rms. • Set the FM deviation meter as: HPF : OFF LPF : 20 kHz De-emphasis: OFF Detector : (P–P)/2 • Transmitting • Push “Reload” bottun on the adjustment program.	Top panel	Connect the FM deviation meter to the antenna connector through the attenuator.	±4.3 kHz	Use the adjustment program.

5-2 RECEIVER ADJUSTMENT

Select an operating using [↑] / [↓] keys, then set specified value using [←] / [→] keys on the connected computer keyboard.

ADJUSTMENT		ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT
			UNIT	LOCATION		
RX SENSITIVITY	1	• Operating channel : ch 16 • Connect a standard signal generator to the antenna connector and set as: Frequency : 156.800 MHz Level : 3.2 µV* (–97 dBm) Modulation : 1 kHz Deviation : ±3.5 kHz • Receiving • Push "Reload" bottun on the adjustment program.		Use the adjustment program.	Maxmum level	Use the adjustment program.
		CONVENIENT: The BPF T1–BPF T4 can be adjusted automatically. ①-1: Set the cursol to "BPF ALL" on the adjustment program and then push [ENTER] key. ①-2: The connected PC tunes BPF T1–BPF T4 to peak levels. or ②-1: Set the cursol to one of BPF T1, T2, T3, or T4 as desired. ②-2: Push [ENTER] key to start tuning. ②-3: Repeat ②-1 and ②-2 to perform additional BPF tuning.				
SQUELCH LEVEL	1	• Operating channel : ch 16 • No RF signals are applied to the antenna connector. • Receiving • Set the cursol to "SQL" on the adjustment program and push [ENTER] key, then push [ENTER] key again.		**NOTE:** Squelch level adjustment is adjusted automatically by the adjustment program.		
	2	• Operating channel : ch 16 • Connect a standard signal generator to the antenna connector and set as : Level : 1.3 µV* (–105 dBm) Modulation : OFF • Receiving • Push [ENTER] key on the keyboard.				

*This output level of a standard signal generator (SSG) is indicated as SSG's open circuit.