## **Adjustment Description**

## I. Required Test Instrument

- 1. Regulated power supply 1 set
  - 1) Adjustment range: 12~15 VDC; output current: 3 A or more
  - 2) Standard output voltage: 13.8 VDC
  - 3) The output voltage is stable, with little fluctuation.
- 2. Ammeter 1 set
- 3. Digital voltmeter 1 set
- 4. Radio communication test set 1 set (with duplex adjusting function)

## II. Test and Adjustment

1. Preparation: place the board on the testing clip (Note: ensure good contact between test terminals and the clip), and power on.

ltem	Condition	Measurement		Adj	Specification	
		Test Instrument	Terminal	Part	Method	/Remarks
DC output voltage		Digital Voltmeter	DC output terminal	Adjustable Resistor	Use ceramic adjuster to adjust adjustable resistor till lock the voltage within requirement.	13.8±0.2V

2. Power supply

3. Transceiver's Power Supply

Item	Condition	Measurement			Adjustment	Specification	
		Test Instrument	Terminal	Part	Method	/Remarks	
Transceive r's Power Supply		Digital Voltmeter	VDD	VR1	Use ceramic adjuster to adjust VR1 till lock the voltage within requirement.	8.0±0.2V	

4. Relay Status (Note: before adjustment, make sure the good connection of the

## antenna or load)

		Measure	A	djustment	Specification/	
Item	Condition	Test Instrument	Terminal	Part	Method	Specification/ Remarks
Operation Frequency	Computer operation system: WIN98SE /WIN2000 Programming software: TC365E		RJ45 Programming port			Receiver:   1CH   455.0125MHz   2CH   455.0125MHz   CTCSS : 67.0Hz   3CH   455.0125MHz   CDCSS : 025   Transmitter:   1CH   465.0125MHz   2CH   465.0125MHz   2CH   465.0125MHz   CTCSS : 67.0Hz   3CH   465.0125MHz   CTCSS : 67.0Hz   3CH   465.0125MHz   CDCSS : 025
Relay frequency deviation	Adjust to CH1 and enter duplex mode. Transmitter connects with RF in port; receiver with Dual out port. Adjust RF GEN to 455.0125MHz <sub>o</sub>	Radio communication test set BPF:0.3~3KHz AF OUT: 1KHz/150mV	Antenna	VR3	Use ceramic adjuster to adjust VR3 and ensure the relay frequency deviation within requirement.	Frequency deviation: 3.0±0.2KHz
Tx Power	Adjust to CH1, press PTT key on handheld MIC to transmit (or check Tx power in duplex status)	Radio communication test set	Antenna		Check	Power: 4.5±0.5W

					Sensitiv	vity
Duplex re. sensitivity	Adjust to CH1, and then duplex mode	Radio communication test set	Antenna	Check		
		BPF:0.3~3KHz AF OUT: 1KHz/150mV			when	turning 120 ±