Adjustment	No.	Adjustment Condition & Tuning	Value	REF No.	CK. Point
Reference Frequency Adjustment& Confirmation	1	Connect a frequency counter to the ANT terminal through an attenuator. Use the compatible software on PC and adjust the following functions via it: Frequency :145.00MHz After the adjustment, confirm that the designated frequency becomes inside specifications.	Inside Specifications	Software Adjustment -	ANT Terminal ANT Terminal
TX Output		Attention 1) Connect a power-meter with 100W maximum range. Attention 2) Use the accessory cable and Connect it to 13.8V power supply.			
	1	Adjust the transmission frequency on 146.000MHz and set the following condition via software. HI POWER :75W MID POWER :25W (For Version #04, 22W) MID-LOW POWER :10W LOW POWER :5W	Instructions value	Software Adjustment	ANT Terminal
	2	Confirm the TX output and TX current inside specifications.	Inside Specifications	-	ANT Terminal
TX Spurious	1	Connect a spectrum analyzer to the ANT terminal through an attenuator and transmit un-modulation signal.			
	2	Confirm the spurious inside specifications.	Inside Specifications	-	ANT Terminal

Adjustment	No.	Adjustment Condition & Tuning	Value	REF No.	CK. Point
Modulation Adjustment & Confirmation		The adjustment of WIDE/NARROW switching function, Set on WIDE mode.			
	1	Connect a detector to the ANT terminal through an attenuator and transmit the signal, set it for amateur band center as follows. HPF :OFF LPF :20KHz De-emphasis :OFF Level-meter :(P-P)/2			
	2	Connect a low frequency oscillator to EXT MIC terminal and set as: Modulation frequency :1KHz Input level: 80mv rms (#05, 15, 25, 35) 20mv rms (Another version)			
	3	Set on Transmission mode and prepare the software on PC, Adjust the maximum modulation level as: Deviation :+/-4.2KHz	+/-4.2KHz	Software Adjustment	ANT Terminal MIC Terminal
	4	Confirm the maximum modulation level at WIDE/ANARROW modes to become inside specifications.	Inside Specifications	-	ANT Terminal MIC Terminal
	5	Adjust low frequency oscillator for output level and confirm the modulation level at WIDE/NARROW modes to become inside specifications.	Inside Specifications		ANT Terminal MIC Terminal
DTCS Wave Form		The adjustment of WIDE/NARROW switching function, Set on WIDE mode.			
	1	Connect a detector to the ANT terminal through an attenuator and transmit the signal, set it for amateur band center as follows. Observe the shape of signal. HPF :OFF LPF :20KHz De-emphasis :OFF Level-meter :(P-P)/2			

Adjustment	No.	Adjustment Condition & Tuning	Value	REF No.	CK. Point
DTCSS CTCSS Adjustment & Confirmation	1	Without input from MIC, transmit the signal and adjust the DTCS BAL via software until DTCS wave shape becomes a straight line preferably. Attention 1) For a correct adjustment, A linear modulation analyzer is necessary with ability of detect the DC component. Attention 2) Do not change the initial value of DTCS decode bit. Connect a linear modulation analyzer to the ANT terminal through an attenuator and set each signaling output ability as: DTCS CODE 023 (Normal code) CTCSS 88.5MHz Set the linear modulation analyzer for condition below:		Software Adjustment	ANT Terminal
	2	HPF :OFF LPF :20KHz De-emphasis :OFF Level-meter :(P-P)/2 Without input from MIC, transmit the signal and confirm the following condition inside specifications as: DTCS : +/- 0.5KHz ~ +/-1.0KHz CTCSS: +/-0.5KHz ~+/-1.0KHz Attention) For a correct adjustment, A linear modulation analyzer is necessary with ability of detect the DC component.	Inside Specifications	-	ANT Terminal

Adjustment	No.	Adjustment Condition & Tuning	Value	REF No.	CK. Point
TX S/N Confirmation	1	Connect a linear modulation analyzer to the ANT terminal through an attenuator and set the condition bellow as: HPF :50Hz LPF :20KHz De-emphasis :OFF Level-meter :(P-P)/2			
	2	Add 1KHz via a low frequency oscillator to external MIC terminal and set the modulation level for 70% of standard modulation.			
	3	Confirm the transmission output and Linear modulation analyzer output to become inside specifications.	Inside Specifications	-	ANT Terminal