

ALIGNMENT PROCEDURES of PWM1000

TX section

1. TX Frequency:

a) Set to the test channel, turn TX on (press PTT switch or connect the MIC load), click Tvcxo [Read] (see figure as below) to read previous data, scroll the cursor left or right (press up or down are available also) to tune the TX frequency, then press the [Tvcxo] to store the tuning data.

2. Maximum Mod. Deviation at 70mV Input

a) Set to the test channel, turn CTCSS to “No Tone”, turn CCITT filter off (for instrument), connect radio antenna jack to instrument RF IN, then connect MIC input signal with 1Khz 70mv(rms).

b) Fine tuning the VRF1 to get the suitable maximum deviation.

3. TX Output Power: They are same procedure in VHF & UHF band

(1) Choose the suitable [Freq seg] , [Cur Pwr] to HI , scroll the cursor of Tx Power to the specify TX power, click [power] to store data to EEPROM.

4. Low Battery indicator. There are able to fine tune the battery indicator as below (there are not necessary to tune it unless you want to modify).

(1) Full battery: Set the power supply voltage to specify voltage, choose [Level] to 4 , press [Battery] to read the voltage, if you want to modify it, tune the [Battery Set] by up or down cursor & click [Set Batt] to check the LCD display.

(2) They are same procedure to tune the other level.

RX section: See the tuning figure as below.

1. 12dB SINAD Sensitivity: There is one basic tuning frequency & tuning step normally use highest frequency to tune the sensitivity in full band.

a) Set radio to tuning channel, SQL to off & connect with test instrument (follow the connection diagram & set the RF level to suitable level).

b) Set radio to highest channel, SQL to off & connect with test instrument (follow the

connection diagram & set the RF level to suitable level).

c) Follow the tuning figure as above, set the value & click [Save] to store the setting.

Maximum Output Power among production units

Max Target Power for Production Unit (dBm)			
PTT/Mode	Frequency		
	440.0125	455.0125	469.9875
Analog-12.5K	25.60	25.60	25.60