ALIGNMENT PROCEDURES

KYODO KG510 BASE/REPEATER

RECEIVER PART

1) BPF-1 and BPF-2 alignment
   Connect the signal generator to the Rx antenna connector of KG510. Align
   the BPF-1 and BPF-2 to obtain the maximum sensitivity. For better alignment,
   if you have spectrum analyzer and tracking generator, connect the tracking gene-
   rator to the Rx antenna connector and pick up the output signal from J101 to
   connect spectrum analyzer. Align the BPF-1 and BPF-2 to have cover the
   desired bandwidth of receiving frequencies.

2) FVR101 alignment
   This is to adjust the squelch tihgt level.

3) VCO alignment
   Set the VCO voltage at 10.5V by L303 at the highest receiving frequency.

TRANSMITTER PART

1) FVR201 alignment
   This potentiometer determines the modulation level. Carefully aling this
   potentiometer to obtain flat deviation from the lowest to the highest frequency
   installed n the transmitter.

2) FVR202 alignment
   This potentiometer determines the low frequency (below 300Hz) deviation.
   When POCSAG, CTCSS or DCS are used, necessary to align to have enough
   deviation at low frequency.

3) FVR203 alignment
   This potentiometer sets the maximum deviation, normally set at 5KHz.
   2KHz or 2.5KHz deviation for narrow spacing can be set by programming
   software.

4) FVR204 alignment
   This is to adjust the transmitter output power.

5) VCO alignment
   Set the VCO voltage at 10.5V at the highest channel frequency.

LOGIC PART

1) FVR1 alignment
   This potentiometer is to obtain 600 ohm 0dBm output of the RF signal.

2) FVR2 alignment

This is to set the deviation level when KG510 is used for a repeater.

3) FVR3 alignment
   This is to set the Tx output power level indicating on the LCD.

1) FVC1 alignment
   This is to shift the CPU clock frequency when necessary. A beat interference
   sometimes happens at certain frequency. In such case, shifting the CPU clock
   frequency may eliminate the interference.

FRONT CONTROL PANEL PART
1) VR401 alignment
   This is a volume controller.

2) VR402 alignment
   This is a squelch level controller.

3) FVR401 alignment
   This is to set the HI-POWER-LEVEL of the Tx output power.

4) FVR402 alignment
   This is to set the LO-POWER=LEVEL of the Tx output power.

5) FVR403 alignment
   This is to set the contrast of the LCD back light.