TK-760HG
Tuning procedure

Before attempting to tune the transceiver, connect the unit to a suitable power supply. Whenever the transmitter tuned, unit must be connected to a suitable dummy load, unless the instruction specify otherwise. The speaker output connector must be terminated with a 4 Ohms dummy load at any time during the tuning and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement at all the time during the tuning.

1.1Enter into tuning mode

Press "SCN" key while turn on the transceiver. After about 1 second, the tuning mode starts.

1.2Frequency version selection

The following operation frequency band can be chosen for the set under tuning.

Panel Display	Frequency
VHF F1	146 to 174MHz

Following keys on the panel can be used for frequency selection:

▲ key Next (Up) frequency selection
▼ key Next (Down) frequency selection
Channel down key Enter (or confirm)

Once, the channel down key is pressed the set tuning items will be started.

1.3Transmitter tuning

Use "SCN", "▼" key to choose tuning item and "A", "▼", ”D/A” key to adjust tuning requirement.

1.3.1 Connect a voltmeter to TP1
1.3.2 Be sure the voltage should be below 7.5V at the test channel 3 and more than 1.0V at the test channel 2 in the Transmission and Reception mode.
1.3.3 Select the test channel 1 and adjust the transmission frequency to 160.100MHz ±100Hz.
1.3.4 Select Tuning Item 2, RF power adjustment.
Adjust RF output power to 50W ±2W.
1.3.5 Select Tuning Item 4, DQT balance adjustment.
Adjust the DQT pulse shape to obtain neat demodulation wave-form.
1.3.6 Select Tuning Item 5, Max. deviation adjustment.
Apply a 1000Hz tone with a 50mV RMS level to the Microphone input.
Adjust the maximum deviation to 3.9kHz ±0.1kHz (for the Wide band), or 1.9kHz ±0.05kHz (for the Narrow band).
1.3.7 Reduce a 1000Hz tone voltage to 5mV.
Be sure the deviation should be in ±2.5kHz to ±3.5kHz.
1.3.8 Select Tuning Item 6, QT deviation adjustment.
Adjust the QT deviation to 0.75kHz ±50Hz (for the Wide band), or 0.35kHz ±25kHz (for the Narrow band).
1.3.9 Select Tuning Item 7, DQT deviation adjustment.
Adjust the DQT deviation to 0.75kHz ±50Hz (for the Wide band), or 0.35kHz ±25kHz (for the Narrow band).
1.3.10 Be sure the DTMF deviation should be in ±2.8kHz to ±3.2kHz (for the Wide band), or ±1.4kHz to ±1.6kHz (for the Narrow band).

1.4 Receiver tuning

1.4.1 Select Tuning Item 8, sensitivity adjustment.
Apply a 160.050MHz to the transceiver antenna terminal.
1.4.2 Tune L11, L13, L15 and L18 to obtain the maximum receiver SINAD.
1.4.3 Tune on the frequencies of 146.050MHz and 173.950MHz,
Change the TV voltage using "□" and "◡" key to obtain the maximum receiver SINAD.
1.4.4 Select Tuning Item 9, squelch adjustment.
Apply a 160.050MHz with 3dB subtracted from the sensitivity value of 12dB SINAD to the transceiver.
1.4.5 Be sure to make the squelch closed once then opened.
1.4.6 Set the RF signal level to 8dB SINAD. Confirm the squelch should be opened.
1.4.7 Turn off the RF signal. Then confirm the squelch should be closed.