

KY 196/KY 197 operation.

Turn-On

Rotate the ON/OFF/Volume Control Knob clockwise from the detented "off" position. Power will be activated and the unit will be ready to operate. The mode of operation and frequencies displayed will be those last used. No warm-up time is required. To override the automatic squelch for audio test, pull the volume control knob "out" and rotate to the desired listening level. Push the knob back "in" to activate the automatic squelch.

Note:

As with all avionics, the KY 196/197 should be turned on only after engine start-up. This is a simple precaution which will help protect the solid-state circuitry and extend the operating life of your avionics equipment.

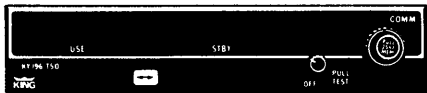
Transmit Indicator:

A lighted "T" will appear between the "use" and "standby" displays to indicate that the mic has been keyed.

The Frequency Mode

To enter the Frequency mode:

1. Enter the Program Mode first by pushing the frequency transfer button and holding it for approximately 3 seconds until a flashing channel number appears in the "use" window.

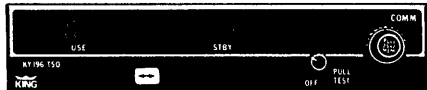


NOTE: The flashing channel number indicates the unit is in the Program Mode. The unit will drop out of the Program Mode in approximately 20 seconds unless one of the frequency selector knobs is rotated within this period.

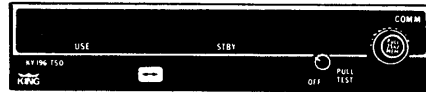
2. Pull the smaller frequency selector knob "out" and turn until a flashing zero is displayed in the "use" window. The "standby" window will display either "uuu" or "---".



3. If the "standby" window is displaying "uuu," push the smaller concentric frequency selector knob "in" and rotate it one step in either direction until "---" is displayed in the "standby" window.

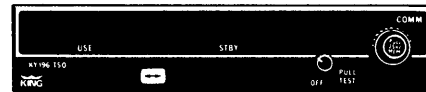


4. Push the frequency transfer button momentarily. A frequency will appear in both displays. The unit is now in the Frequency Mode of operation and will remain in this mode through power shutdowns or until the pilot manually selects another mode.

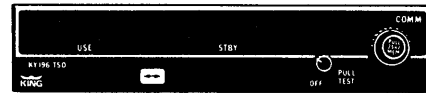


To Operate In The Frequency Mode:

1. **Select A New Frequency.** Rotate the frequency selector knobs to enter the desired frequency into the standby window. Clockwise rotation increases the frequency, counterclockwise decreases it. The outer, larger knob changes the MHz portion of the frequency, while the smaller inner knob changes the kHz portion. The smaller knob causes changes of 50 kHz when pushed "in" and 25 kHz when pulled "out." When reaching the outside of the band (either 135 MHz or 118 MHz), further knob movement will cause the display to wrap around to the other end of the band. (That is 135 MHz advances to 118 MHz).



2. **Press The Transfer Button To Activate The New Frequency.** By pressing the transfer button, the newly entered frequency in the "standby" window flip-flops with the frequency in the "use" window and this new frequency then tunes the radio for operation. It's easy to tune two frequencies and switch back and forth in this manner.

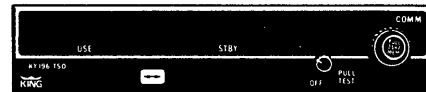


The Program Mode

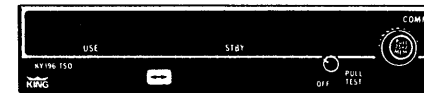
The Program Mode is used to set memory locations for use in the channel mode of operation.

To enter the Program Mode:

1. Press the transfer button and hold it in until a flashing channel number appears in the "use" window.



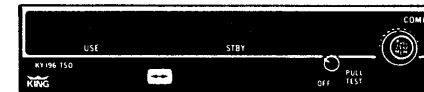
2. Pull the smaller frequency selector knob out and turn it until a flashing zero appears in the "use" window. The "standby" window will display either "uuu" or "---".



3. If the "standby" window is displaying "---," push the smaller frequency selector knob "in" and turn it one step in either direction. "uuu" will then be displayed in the "standby" window.



4. Pull the small frequency selector knob out and rotate it to select the desired channel to be programmed which will appear in the "use" window.

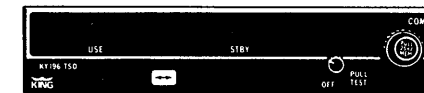


You Are Now Ready To Program A Preset Channel. Continue As Follows:

5. Push the small frequency selector knob "in" and select the frequency by rotating the larger selector knob to change the MHz portion of the frequency, and the smaller knob to change the kHz portion in 25 kHz steps.

To Program Additional Channels Repeat Steps 4 And 5

NOTE: If you wish to program less than 9 channels and have certain channel numbers skipped over when operating in Channel Mode, proceed as follows: Rotate the MHz frequency knob left or right beyond 135 or 118 MHz. Dashes "---" will appear in the "standby" window. This indicates that the affected channel number will be skipped when operating in the Channel Mode.



To Exit The Program Mode:

1. Press the frequency transfer button or wait 20 seconds with no switch activity and the KY 196/197 will return to the Channel Mode automatically.

The Channel Mode

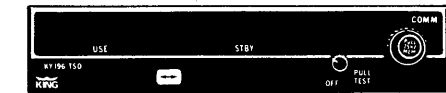
The Channel Mode is used to recall preset channels stored in memory for use in operating the KY 196/197. To enter the Channel Mode:

1. Push the frequency transfer button and hold it for 3 seconds until a channel number appears flashing in the "use" window.

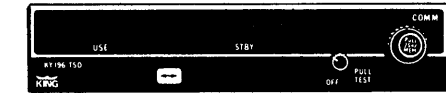
NOTE: The flashing channel number indicates the KY 196/197 is in the Program Mode. The unit will drop out of the Program Mode in approximately 20 seconds unless a frequency knob is rotated during this time.



2. Pull the smaller frequency selector knob "out" and rotate until a flashing zero appears in the "use" window. If the "standby" window is displaying a "---," push the smaller selector knob "in" and rotate it one step in either direction until "uuu" is displayed.

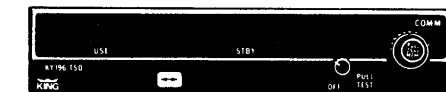


3. Push the frequency transfer button momentarily (or simply wait 20 seconds as described in the note above). A frequency will appear in both displays. The unit is now in the Channel Mode of operation and will remain in this mode through power shutdowns until the pilot manually selects another mode.



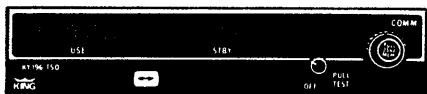
To Operate In The Channel Mode, Proceed As Follows:

1. Pull the smaller frequency selector knob out and rotate it in either direction to select the desired channel number in the "use" window. The frequency programmed for this preset channel appears in the "standby" window. (The active frequency remains the same although it is temporarily not displayed.)

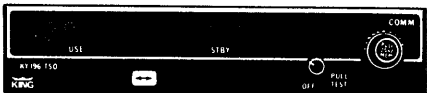


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After about 2 seconds, the channel number will disappear and the active frequency will again appear in the "use" window. The programmed frequency associated with the selected channel will remain in the "standby" window.



2. Push the frequency transfer button to flip-flop the frequencies. Now the frequency associated with the pilot programmable channel becomes the frequency in use.

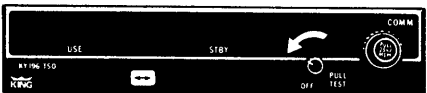


NOTE: With the smaller frequency selector knob pushed "in", the kHz portion of the frequency operation is identical to that of the Frequency Mode with one difference: Rotating the smaller selector knob now changes the "standby" frequency in 25 kHz steps rather than 50 kHz steps.

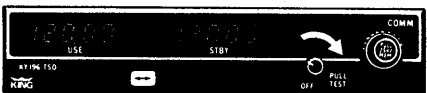
Direct Tune Mode

The Direct Tune Mode is a backup mode which allows frequency changes to be made directly into the "use" window. To enter the Direct Tune Mode:

1. Turn the COMM Volume Control counterclockwise to the "off" position.



2. Hold the frequency transfer button while turning the COMM Volume Control Knob to the "on" position.

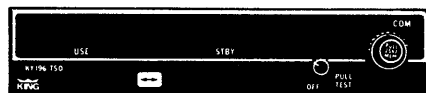


Release the frequency transfer button. The "use" and "preset" window will both display 120.00 MHz. The frequency selector knobs can now be used to directly tune the active frequency.



NOTE: The 120.00 MHz frequency always appears initially when entering the Direct Tune Mode. This serves as a benchmark so the pilot can tune the radio to the frequency he wants by counting detents if the radio malfunctions and the display goes blank. The larger frequency selector knob will change the numbers to the left of the decimal 1 MHz per detent. The smaller knob changes the number to the right of the decimal 50 kHz per detent when pushed "in" and 25 kHz per detent when pulled "out".

3. If you wish to access the 121.5 emergency frequency, turn the larger frequency selector knob one detent clockwise and the smaller knob (pushed "in") ten detents either clockwise or counterclockwise.



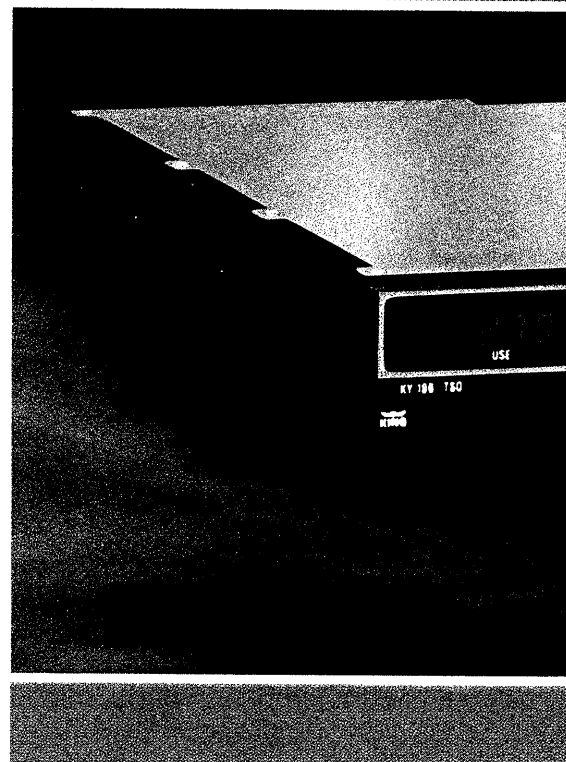
To Exit The Direct Tune Mode

Push the frequency transfer button and you will exit the Direct Tune Mode.

PILOT'S KING KY 196 SILVER CROWN COM

This Pilot Guide provides easy reference on designed to be separated from the brochure of the radio.

NOTE: KY 196/197s which allow the four identified by noting that "Pull 25K/MEM" is radio. If this knob has nothing written on it operate in Frequency Mode.



King Radio Corporation, 400 North Rogers Road, Olathe, Kansas 66062 • (913) 782-0400
Telex WUD (0) 4-2299 • Cable: KINGRAD

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Tel. Geneva 98 58 80 • Telex 289445 KING CH • Cable: KINGRADIO

SECTION III OPERATION

3.1 OPERATING PROCEDURE

3.1.1 TURN ON

To turn on the unit, rotate the VOL knob clockwise from the OFF position. A non-volatile memory stores frequency and mode information on power down. When power is activated the USE and STANDBY windows will display the frequencies displayed at power down and the mode of operation will be the same as at power down. Frequencies stored in memory channels are also retained.

After activating power, pull the VOL knob out to override the automatic squelch and rotate the VOL knob to the desired audio level. Push the VOL knob back in to activate the automatic squelch.

NOTE

THE KY 196/197 SHOULD BE TURNED ON ONLY AFTER ENGINE STARTUP.
THIS IS A SIMPLE PRECAUTION WHICH HELPS PROTECT THE SOLID STATE
CIRCUITRY AND EXTENDS THE OPERATING LIFE OF YOUR AVIONICS
EQUIPMENT.

3.1.2 TRANSMIT INDICATOR

During COMM transmission, a lighted "T" will appear between the USE and STANDBY windows to indicate that the transceiver is in the transmit mode of operation.

3.1.3 MODES OF OPERATION

A. Frequency Mode

In the Frequency Mode of operation frequencies are entered into the STANDBY window of the display and can then be transferred into the USE window by pressing the transfer button. The Frequency Mode may be entered either by entering the Program Mode and entering dashes (---) into Channel 0 or alternately may be entered from the Direct Tune Mode.

To select frequencies in this mode, the MHz portion of the frequency displayed in the STANDBY window may be incremented or decremented in 1 MHz steps by rotating the MHz knob either clockwise or counterclockwise. MHz frequencies will roll over or roll under at each band edge (118 or 135 MHz). The KHz portion of the frequency displayed in the STANDBY window may be incremented or decremented by rotating the 25K/MEM knob either clockwise or counterclockwise. Frequency selection is in 50 KHz steps when the 25K/MEM is pushed in and is in 25 KHz steps when the 25K/MEM is pulled out. KHz frequencies roll over from 95 to 97 to 00 and roll under from 00 to 95 or 97 according to the position of the 25K/MEM knob. Frequencies are transferred from the STANDBY to the USE window and vice versa by depressing the transfer button.

B. Program Mode

The Program Mode is used to program frequencies into memory for later recall and to select either the Frequency Mode or the Channel Mode of operation.

To enter the Program Mode:

1. Depress and hold the transfer button until a flashing Channel number appears in the USE window of the display (approximately three (3) seconds).
2. Pull the 25K/MEM knob out and rotate it until a "0" appears in the USE window.
3. Push the 25K/MEM knob in and rotate it until "uuu" is displayed in the STANDBY window of the display.

KING
KY 196/196E/KY 197/197E
VHF COMMUNICATIONS TRANSCEIVER

To program frequencies into memory:

1. Pull the 25K/MEM knob out and rotate it to select a Channel number (1-9).
2. To enter the frequency, push the 25K/MEM knob back in. The MHz portion of the frequency may be incremented or decremented in 1 MHz steps with the MHz knob. As each band edge (118 or 135 MHz) is reached, the next transition of the MHz knob will cause dashes (---) to be displayed. Rollover to the opposite band edge will occur at the next switch transition. The KHz portion of the frequency may be incremented or decremented in 25 KHz steps with the 25K/MEM knob.
3. If it is desired to program less than nine (9) channels, store dashes (---) in the unwanted channels. In the Channel Mode, channels programmed with dashes will be skiooed.
4. When all channels have been programmed, press the transfer button to exit the Program Mode. The radio will now be in the Channel Mode of operation. The radio will automatically exit the Program Mode and enter the Channel Mode if at any time while in the Program Mode a twenty (20) second interval lapses with no switch activity.

While in the Program Mode the radio remains tuned to the frequency displayed in the USE window before this mode was entered.

C. Channel Mode

The Channel Mode is used to recall for use the channel information previously stored in the Program Mode. In order to enter the Channel Mode, the Program Mode must first be entered and "uuu" must be programmed into Channel 0. After these requirements are met, either pressing the transfer button or allowing twenty (20) seconds to elapse without any switch activity will cause the radio to enter the Channel Mode.

To recall channel information, pull the 25K/MEM knob out and rotate it until the desired channel number appears in the USE window. The channel number will be displayed for approximately two (2) seconds after which the USE window will display the active frequency. The frequency programmed into the channel selected will be displayed in the STANDBY window and may be transferred to the USE window by pressing the transfer button. The radio will remain tuned to the last active frequency displayed until the recalled channel information is transferred to the USE window.

When operating in the Channel Mode, frequencies displayed in the STANDBY window may be temporarily altered with the frequency selectors and transferred to the USE window. MHz and KHz frequency selection is the same as in the Program Mode. If the programmed frequency for a particular channel is changed in this manner, the original frequency remains in storage and will be displayed the next time that channel is recalled.

D. Direct Tune Mode

The Direct Tune Mode allows direct selection of frequencies displayed in the USE window.

To enter the Direct Tune Mode, the radio must first be turned off. Hold the transfer button depressed while simultaneously turning the radio on, then release the transfer button. Both windows will display 120.00 and the frequency selectors may be used to enter frequencies directly into the USE window. MHz and KHz frequency selection is the same as in the Frequency Mode.

Entering the Direct Tune Mode automatically programs dashes (---) into Channel 0. Therefore, if the transfer button is depressed after entering this mode, the radio will enter the Frequency Mode of operation.

To return to the Channel Mode after operating in the Direct Tune Mode, it is necessary to first enter the Program Mode and program "uuu" into Channel 0. Channel information previously programmed remains stored in memory so it is not necessary to re-enter this information. The Channel Mode may then be entered by depressing the transfer button.