

SECTION III OPERATION

3.1 POWER ON UNIT

To power on the unit, rotate the Volume (VOL) knob clockwise from the OFF position. When power is activated the Use and Standby (STBY) windows will display the frequencies and/or mode stored in the non-volatile memory before power down. 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.

CAUTION: THE KY 96A, KY 97A SHOULD BE POWERED 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.

3.2 TRANSMIT INDICATOR

During Comm transmissions, a TX will appear between the USE and STBY windows to indicate that the transceiver is in the Transmit mode of operation.

3.3 MODES OF OPERATION

3.3.A. Frequency Mode

Frequency selection is accomplished in the Standby Entry mode by changing the frequency display in the STBY window of the display with the tuning knobs, and then transferring the selected frequency into the USE window by pressing the Transfer button. The larger tuning knob will increment or decrement the MHz portion of the display in 1 MHz steps with rollover at each band edge (118.000 MHz or 135.975 MHz). The smaller tuning knob will increment or decrement the kHz portion of the display in 50 kHz steps with the knob pushed in or in 25 kHz steps with the knob pulled out. While in the Standby Entry mode, the transceiver remains tuned to the frequency displayed in the USE window at all times.

NOTE: Extended Frequency units will rollover at 118.000 and 136.975 MHz.

3.3.B. Channel Mode

Momentarily pressing the Channel (CHAN) button while in the Frequency mode puts the radio in the Channel mode. The last active frequency remains tuned and displayed in the USE window. The last used channel number is displayed in the channel digit unless no channels have been programmed, in which case the radio defaults to Channel 1 and dashes are displayed in the STBY window. Turning either tuning knob changes the channel number and corresponding frequency in the STBY window. The channels will only increment and decrement to channels that have been programmed. If there has been no activity for five seconds the radio will return to Frequency mode and the channel frequency is placed in the STBY window. Pressing the CHAN button

before the five second delay is completed will return the radio to the Frequency mode and the status of the Frequency mode prior to entering Channel mode remains the same.

When in Channel mode, pressing the Transfer button will return the radio to Frequency mode. The channel frequency will become the new USE frequency and the last USE frequency will become the new STBY frequency. If the radio was in Direct Tune mode (see [paragraph 3.3.E](#) below) prior to entering Channel mode, pressing the Transfer button or allowing the radio to time out will bring it back to Standby Entry.

3.3.C. Program Mode

The Program mode is entered by pressing and holding the CHAN button for longer than two seconds. The last active frequency remains tuned and displayed in the USE window. The last used channel is displayed when Program mode is entered. The channel number flashes and turning either tuning knob changes the channel number. Pressing the Transfer button will cause the frequency associated with that channel to flash. The tuning knobs then work as in the Frequency mode, except that between the rollover points (118.XX and 135.XX or 136.XX) dashes are displayed. These dashes are used to de-program channels, and to display a channel that is unprogrammed. When the channel frequency is flashing, pressing the Transfer button will cause the frequency to stop flashing and the channel number to start flashing at which time a new channel may be selected for programming.

3.3.D. Program Secure Mode

Program Secure mode is used to secure or lock the frequency that is assigned to a channel so that the frequency assigned to that channel cannot be changed. All channels or individual channels can be Program Secured. The following list of operations is given to Program Secure or Un-Program Secure a channel:

To Program Secure a Channel

- * Hold the CHAN button in for more than 2 seconds (Program mode).
- * Momentarily press the Transfer button (flashing frequency).
- * Change channel frequency to desired Program Secured frequency.
- * Ground the Program Secure pin (TP 701).
- * Momentarily press the Transfer button (Flashing channel number).
- * Unground the Program Secure pin.

To Un-Program Secure a Channel

- * Hold the CHAN button in for more than 2 seconds (Program mode).
- * Ground the Program Secure pin (TP 701).
- * Momentarily press the Transfer button (flashing frequency).
- * Unground the Program Secure pin.
- * Momentarily press the Transfer button (Flashing channel number).

3.3.E. Direct Tune Mode

The Direct Tune mode is entered from the Standby Frequency Entry mode or Channel mode by pushing the Transfer button for longer than 2 seconds. The tuning knobs operate as in Standby Frequency Entry, but will change the USE frequency, rather than the STBY frequency. The radio will be tuned to the Active frequency.

Momentarily pushing the Transfer button returns the radio to Standby Frequency Entry. The Standby frequency prior to Active Entry mode remains unchanged.

3.4 REMOTE FREQUENCY TRANSFER (J96A pin 11 or J97A pin 12)

The Remote Frequency Transfer button operates identically to the front panel Transfer button with the exception that holding the Remote Transfer button for two seconds does not place the radio in the Active Entry mode.

3.5 REMOTE CHANNEL INCREMENT (J96A, J97A pin L)

Pressing the Remote Channel button will cause the system to enter the Channel mode of operation and will increment the channel from the previous channel number used.

3.6 DIM SELECT (J96A, J97A pin A)

When Dim Select is in the open position, display backlight dimming will track a 14 V lighting bus. When Dim Select is connected to ground the display backlight brightness tracks or follows a 28 V lighting bus. When Dim Select is connected to the aircraft supply voltage the display backlighting will be at half brightness.

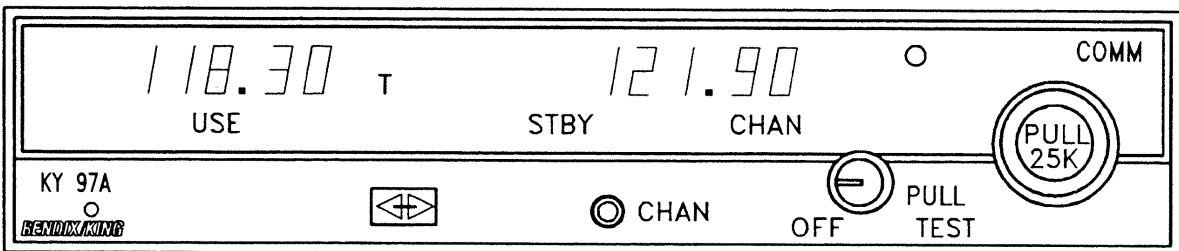
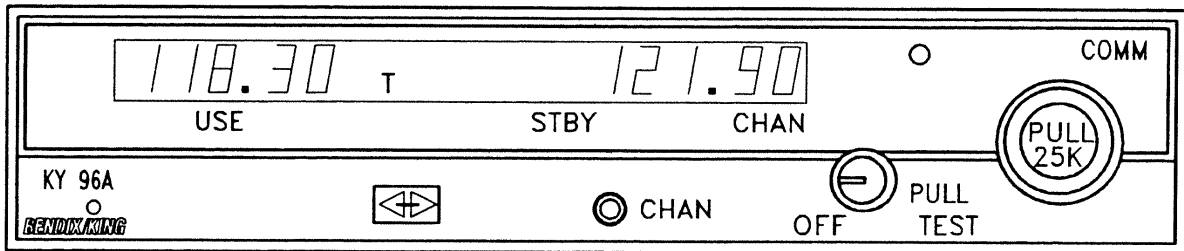


FIGURE 3-1 KY 96A, KY 97A Controls