

**Bendix/King  
Silver Crown Plus™  
Avionics Systems  
Pilot's Guide**

---

**Nav/Comm Systems  
Navigation Receiver**



**Honeywell**

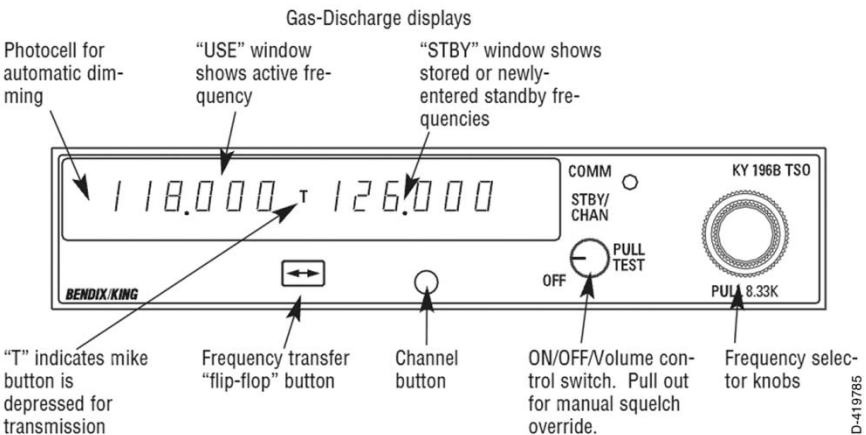
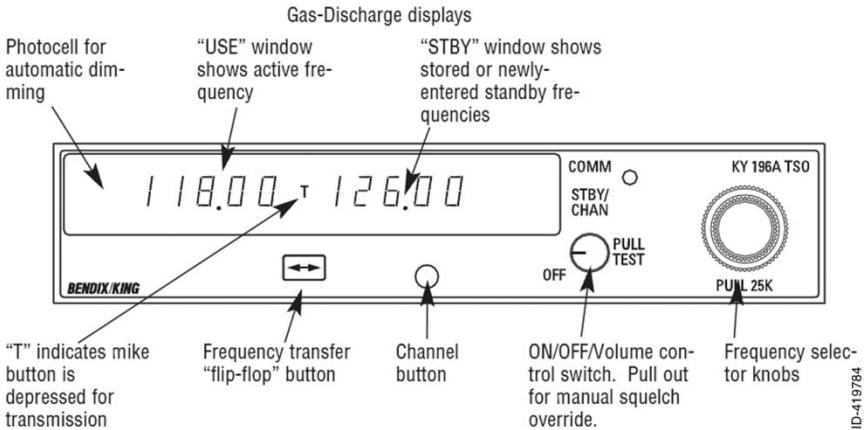
# **Bendix/King Silver Crown Plus™ Avionics Systems Pilot's Guide**

## **TABLE OF CONTENTS**

KY 196A, KY 197A and KY 196B VHF Communications Transceivers .....	23
KN 53 Silver Crown TSO'd Navigation Receiver .....	37

## KY 196A, KY 197A and KY 196B VHF Communications Transceivers

### KY 196A, KY 197A and KY 196B Operation



### Power Up

When you turn the ON/OFF/Volume knob clockwise to the "ON" position, your unit will display the frequencies last used in the "USE" and "STBY" (standby) windows.

To override the automatic squelch, pull the ON/OFF/Volume

knob out and, judging by static noise, rotate it to the desired volume level. Push the knob back in to activate the automatic squelch.

**NOTE:** As with all avionics, the KY 196A, KY 197A and KY 196B should be turned on only after engine startup. This simple precaution will help protect the solid-state circuitry and

extend the operating life of your equipment.

## Transmitting

During COMM transmissions, a “T” will appear between the “USE” and “STBY” windows to indicate the keying of the microphone.



## KY 196A/197A Frequency Mode (Normal Operation)

1. Select a new frequency in the “STBY” window, using the frequency selection knobs. The larger knob controls changes in increments of 1MHz. The smaller knob controls changes in increments of 50kHz when pushed in, and 25kHz when pulled out.

At the outside limits of the band, the display will “wrap around” to the other end of the band, going from 136MHz to 118MHz.



2. Press the transfer button to activate the new frequency. The newly entered frequency in the “STBY” window flips with the frequency in the “USE” window. This new frequency is now available for use. An optional remote-mounted frequency transfer button may also be used to perform this “flip-flop” function.



## KY 196B Frequency Mode (Normal Operation)

1. Select a new frequency in the “STBY” window, using the frequency selection knobs. The larger knob controls changes in increments of 1MHz. The smaller knob allows selection of 25kHz frequencies only when pushed in, and both 8.33kHz and 25kHz frequencies when pulled out.

At the outside limits of the band, the display will “wrap around” to the other end of the band, going from 136MHz to 118MHz.



2. Press the transfer button to activate the new frequency. The newly entered frequency in the “STBY” window flips with the frequency in the “USE” window. This new frequency is now available for use. An optional remote-mounted frequency transfer button may also be used to perform this “flip-flop” function.



## Program Mode

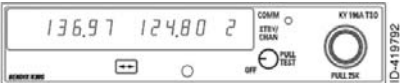
The Program Mode is used to program frequencies for use in the Channel Mode.

1. Depress the channel (CHAN) button for more than two seconds, until the channel number (to the right

of the standby frequency) begins flashing. The most recently used active frequency will remain displayed in the “USE” window.



2. Turning either frequency selection knob will change the channel.



3. Once you've selected the desired channel number, you may program a new frequency by pressing the transfer button. This will cause the frequency in the “STBY” window to flash. The tuning knobs are now used to enter desired frequency.



4. To program additional channels, push the transfer button again to make the channel number flash, and repeat step three above.



5. If you wish to program fewer than nine channels while skipping certain channel numbers, rotate the MHz frequency knob left or right beyond 136MHz or 118MHz. Dashes (---) will appear in the “STBY” window, indicating that the channel will be skipped when the system is operating in the Channel Mode.



6. To exit the Program Mode, momentarily press the channel button. The unit will also automatically exit the Program Mode if no programming occurs within approximately 20 seconds.

## The Program-Secure Mode

The Program Secure Mode may be used to lock a desired frequency to a specific channel number, prohibiting program changes from the front of the unit. Your KY 196A, KY 197A or KY 196B should be taken to your Bendix/King dealer for programming in the Program Secure Mode.

## Channel Mode

The Channel Mode is used to recall preset frequencies stored in memory.

1. To enter the Channel Mode momentarily, push the channel button while in the Frequency Mode. The active frequency remains displayed in the “USE” window, and the last used channel number and its associated frequency are displayed in the “CHAN” and “STBY” windows.



If no channels have been programmed, channel 1 automatically disappears and dashes are displayed in the “STBY” window.

2. Turn either frequency selection knob to change the channel number

and the channel's corresponding frequency in the "STBY" window.



3. If there is no activity for five seconds, the radio will exit the Channel Mode and return to the Frequency Mode, with the channel frequency remaining in the "STBY" window.



4. You can also return to the Frequency Mode by either:

a. Pressing the channel button before the five-second delay, in which case the radio recalls the "USE" and "STBY" frequencies prior to entering the Channel Mode, or

b. Pressing the transfer button, so that the channel frequency becomes the active frequency and the last "USE" frequency becomes the new "STBY" frequency.

**NOTE:** If the optional remote channel increment switch is installed, each activation of the switch will put the unit in the Channel Mode and advance the channel number from the previous channel used.

## Direct Tune Mode

The Direct Tune Mode is entered by pressing and holding the transfer button for longer than two seconds. The "STBY" frequency will disappear and the frequency in the active

window can be changed with the frequency selection knobs.



Momentarily pushing the transfer button will return the unit to the Frequency Mode (normal operation). The "STBY" frequency displayed prior to entering the Direct Tune Mode will return unchanged.



## Default Mode

Turning on your KY 196A, KY 197A or KY 196B while pressing the transfer button will bring the unit up in the Direct Tune Mode and install 120.00MHz or 120.000MHz (KY 196B) as the active frequency. This will aid the pilot in blind tuning the radio in the unlikely event of display failure.



## Display Adjust Modes

To enter the Display Adjust Mode, press and hold the channel button until the Program Mode is entered. Continue holding the channel button while simultaneously pressing and holding the frequency transfer button until "dA 1" replaces the frequency in the "USE" window.



The frequency selector knobs are used to change the value in the "STBY" window. Momentarily pressing the channel button steps the unit through the Display Adjust Modes, "dA 1" through "dA 3". Press the frequency transfer button to exit the Display Adjust Mode.

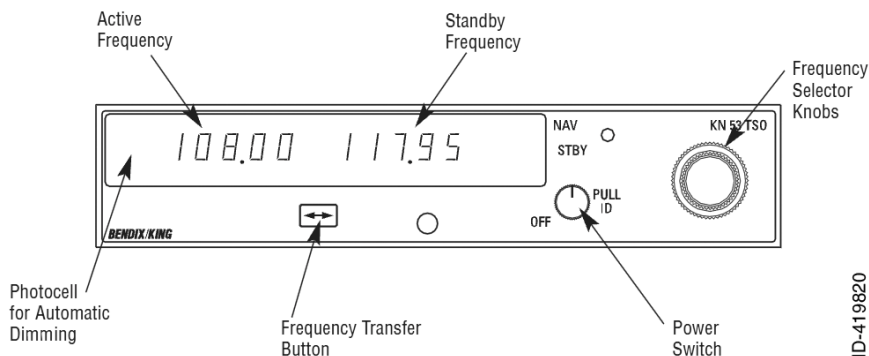
Display Adjust 1 (dA 1) is used to vary the dim/bright response time to changes in ambient light on the display photocell. The range of values for dA 1 is 1-8, with 1 representing normal.

The normal setting, 1, provides immediate display brightness changes when there are changes in the light falling on the photocell. With dA 1 set to a value of 8, the response time is approximately eight seconds. dA 1 values of 2 through 7 provide intermediate response times.

Display adjustment 2 (dA 2) is used to vary the display brightness when ambient light conditions are less than direct sunlight, such as in a dark cockpit. dA 2 values range from 0-64, with 0 being dimmest and 64 being brightest; the normal dA 2 setting is 20.

dA 3 values range from 0 to 255, with 0 being dimmest and 255 being brightest. This adjustment varies the amount of ambient light required for the display to reach its full dim and bright levels. Normal dA 3 values for a new display range from 0 to 30.

A common use of dA 3 is to adjust the KY 196A, KY 197A or KY 196B display brightness to match the brightness of other radios' displays. Another use is to provide display brightness compensation as the display ages.

**KN 53****Silver Crown TSO'd Navigation Receiver****Operating the KN 53**

ID-419820

**Power Switch**

This knob controls ON/OFF/VOL/IDENT. To turn on the unit, rotate the knob clockwise from the detented OFF position. Rotation of this control also adjusts NAV audio volume. NAV voice can be heard when the knob is pushed in. When the knob is pulled out, the Morse Code IDENT signal plus voice can be heard.

**Frequency Selection**

By rotating the concentric frequency selector knobs either clockwise or counterclockwise, the desired operating frequency can be dialed into the standby display window. A clockwise rotation will increase the displayed frequency number, while a counterclockwise rotation will decrease it. The larger selector knob is used to change the MHz portion of the frequency display;

the smaller knob changes the kHz portion in 50 kHz steps. At either band edge of the 108.00 to 117.95 MHz frequency spectrum, an off-scale rotation will wrap the display around to the other frequency band-edge (i.e., 117.95 advances to 108.95 with MHz knob rotation, or 117.00 with kHz knob rotation). DME and optional internal glideslope channeling are also controlled by these selector knobs.

**NAV Frequency Operation**

The desired operating frequency is first entered into the standby display. To activate, push the transfer button. This will interchange the frequencies in the 'use' and 'standby' displays and tune the receiver to the new operating frequency.