

## Bendix King KY 196A Pilot's Guide

### COM Radio

Two radios are provided:

KY 196A COM1, filename: **BendixKingComNav2!KY196A\_JD\_1**

KY 196A COM2, filename: **BendixKingComNav2!KY196A\_JD\_2**



### Hotspots:



1. Volume, ON/OFF switch and **PULL TEST** squelch switch
2. COM Frequency Transfer (Flip-Flop) button
3. COM MHz Tune
4. COM kHz Tune and **PULL 25K**
5. **CHAN** (Channel) button

A comprehensive simulation of the real Bendix King KY196 radio.

Advanced features found on this complex radio system have been accurately simulated, with far greater functionality than is found on the default Flight Simulator radios. The real Bendix King Silver Crown Plus Pilot's Guide (available on the web for download) may be used instead of the description found here.

Operation of this radio has been made as close as possible to their real-life counterpart.

To this end the simulation uses right and left mouse clicks for knobs (right-click for increment, left-click for decrement). This is considered superior the standard Flight Simulator method of left clicks only, and more closely simulates real-life operation. Alternatively, the mouse wheel can also be used on all knobs to increment or decrement values. Knobs that can be pulled out and pushed in use middle mouse clicks.

All standard Flight Simulator shortcut key assignments operate normally. If a previously saved "Flight" is loaded, all relevant frequencies and operating modes are correctly selected.

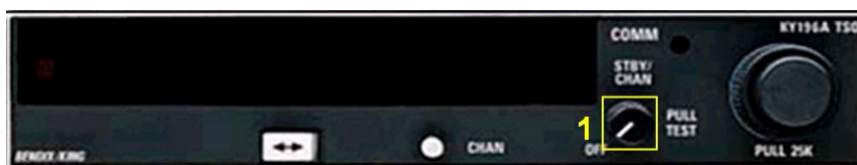
This radio defaults to the On state, as the majority of aircraft are fitted with an Avionics Master switch, in which case all individual radios are (and should be) normally left On for convenience and consistency.

### COM Volume and ON/OFF switch (1)

The animated COM volume knob (1) can be rotated through 270° just like the real unit (although in this simulation the COM volume does not change - it is not possible to change individual volumes in Flight Simulator). Use right-click to rotate clockwise, left-click to rotate anti-clockwise, or use the mouse wheel. To switch the unit OFF rotate fully anti-clockwise. A click will be heard and the unit will be "dead".

(Note: for sounds to be heard, the gauge [dsd\\_fsx\\_xml\\_sound.gau](#) must be installed – see Note 1.)

Rotate clockwise to turn the unit back on. A non-volatile memory stores the Active and Standby frequencies on power down. When the unit is turned on again they will be restored to the display.



### PULL TEST squelch switch (1)

To test the radio, middle-click the PULL TEST knob (1) to simulate pulling it out. The animated knob can be seen to be pulled out. A loud static hiss is heard (as long as the relevant radio is selected in the Audio Selector unit). (In the real radio the PULL TEST turns the squelch off, and the static hiss (if there is no other radio transmission) indicates that the radio is working, and allows a comfortable volume level to be set).



### Set COM Frequency - Normal (Active/Standby) Operation

Select the desired Standby Frequency by clicking the COM MHz Tune (3) and COM kHz Tune (4) hotspots. Use right-click to increment, left-click to decrement (or use the mouse wheel).

Turning the COM kHz Tune beyond a band edge (118 or 136 MHz) will cause the tuning to wrap around to the opposite band edge.

The COM kHz Tune knob can be pushed in and pulled out using a mouse middle-click. A quiet click is heard. The knob is animated – it can be seen to be in or out.

When pushed in the Standby Frequency is changed in steps of 50 kHz, and when pulled out in steps of 25 kHz. The knob initially defaults to the out (25 kHz) position.

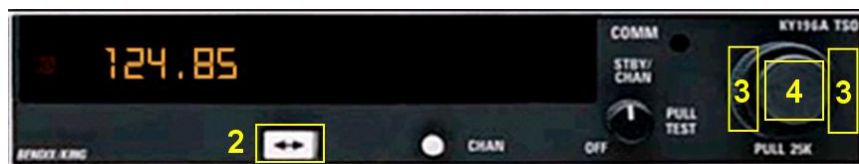


To exchange frequencies, making the Standby Frequency the Active Frequency and vice-versa, left-click the COM Frequency Transfer (Flip-Flop) button (2).

### Set COM Frequency - Direct Active Tune

Click and hold the COM Frequency Transfer (Flip-Flop) (2) button for 2 seconds or more to enter the Direct Active Tune mode. The Standby Frequency display will disappear, and now the Active Frequency can be entered directly by clicking the COM MHz Tune (3) and COM kHz Tune (4) hotspots.

To exit the Direct Active Tune mode, click the COM Frequency Transfer (Flip-Flop) button (2).



### Channel Mode

As on the real radio, this KY196A simulation has the provision to program and recall 10 channels. (Note, for channel save and recall Logger must be installed – see Note 2.)

The non-volatile channels are saved in a file, and are restored next time Flight Simulator is run. Click the CHAN button (5) to engage Channel Mode. Click the COM kHz Tune button (4) to select the required channel. The Channel Number is shown in the display, and a pre-programmed Channel Frequency will appear for each channel selected.

If there is no activity for 5 seconds the radio will exit Channel Mode with the Standby Frequency now changed to the Channel Frequency. Alternatively click the COM Frequency Transfer (Flip-Flop) button (2) to exchange frequencies (making the Channel Frequency the Active Frequency). Or click the Channel button (5) within the 5 second period to exit Channel Mode, keeping the previous Standby frequency.

Note that if a channel has been programmed with dashes (see below), then this channel will be skipped while in Channel Mode. If no channels have been programmed, dashes (---) appear in the display.



### Channel Program Mode

To program channels hold the CHAN button (5) for 2 seconds to engage Channel Program Mode. The Channel Number will flash to indicate that it can be changed.

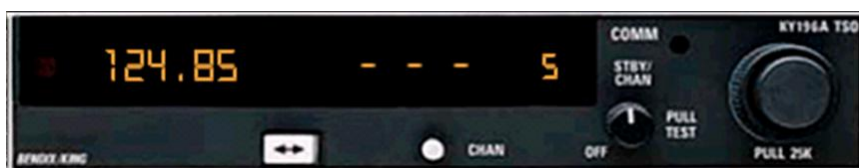


Click the COM kHz Tune button (4) to select the required channel.

To enter the required frequency click the COM Frequency Transfer (Flip-Flop) button (2).

The Standby Frequency flashes to indicate that now it can be changed, and the Channel Number stops flashing. Click the COM MHz Tune (3) and COM kHz Tune (4) buttons to select the required frequency in the normal way. If the COM Frequency Transfer (Flip-Flop) button (2) is pressed again the Channel Number flashes to indicate that the channel can now be changed again. In this way the user can program a number of channels by clicking the COM Frequency Transfer (Flip-Flop) button and using the same procedure.

Click the COM Channel Button (5) to exit the Channel Program Mode and save the channel information. If while setting the Channel Frequency a frequency greater than 135.975 MHz or less than 118.000 MHz is set, dashes (---) appear in the display. This will cause this channel to be skipped when in Channel Mode.



The COM channel frequencies are saved in the following files.

(These files are created automatically as soon as a channel is programmed.)

..\DataJD\KY196A\_1\_chans.ini

..\DataJD\KY196A\_2\_chans.ini

(Note: these files are text files, and can be opened using Notepad. Channel frequencies can be modified directly in these files if you don't want to go through the rigmarole of programming channels like in the real radio!)

**Note 1. Sounds**

For custom sounds to be heard, the gauge `dsd_fsx_xml_sound.gau` must be installed. This is a freeware gauge from Doug Dawson. See Credit for Sound Gauge below.

Installation

Download the file: `dsd_fsx_xml_sound.zip` available from FlightSim.com.  
Unzip the zip file.

## Step 1.

Install the file: `dsd_fsx_xml_sound.gau` into the flight simulator **Gauges** sub-folder.  
(Normally ...\\fsx\\Gauges or ...\\Flight Simulator 9\\Gauges)

## Step 2.

Install the file: `SoundJD.ini` into the flight simulator **Gauges** sub-folder.  
(The file `SoundJD.ini`, and the folder: **SoundJD** are included in the KX155A package.)

## Step 3.

Install the folder **SoundJD** into the flight simulator **Sound** sub-folder.  
(Normally ...\\fsx\\Sound or ...\\Flight Simulator 9\\Sound)

## Step 4.

Copy and paste the line:  
`gaugenn=dsd_fsx_xml_sound!Sound, 2,2,2,2, ./gauges/SoundJD.ini` into the [Window00] section in the `Panel.cfg` file for every aircraft that has the KX155A installed.  
(Where nn is the next available gauge number). Note the dot before `/gauges` !

Credit for Sound Gauge

Many thanks to Doug Dawson, for his excellent freeware sound gauge.  
It is available from various flightsim websites (e.g. Flightsim.Com and Avsim.)  
This is a very sophisticated and versatile application - the above installation only used a fraction of the capability available.

**Note 2. Logger**

In order to save and recall channel files, an application called Logger must be installed.  
Logger is a FS9 and FSX module that provides file read and write capability for XML gauges.

Installation

Download the file: `Logger Modules v1.1.zip` available from:  
<https://robbiemcelrath.com/fs/logger/about>  
This is a freeware application from Robbie McElrath. See Credit for Logger below.  
Unzip the zip file.

## Step 1:

For FS9 copy the file `Logger9.dll` into the flight simulator **Modules** sub-folder.  
For FSX copy the file `LoggerX.dll` into the flight simulator **Modules** sub-folder and follow the instructions provided on the above website in the Help section.

## Step 2:

Create a folder in the flight simulator root folder called **DataJD**.  
(The flight simulator root folder is normally ...\\fsx or ...\\Flight Simulator 9)

Credit for Logger

Many thanks to Robbie McElrath, for his excellent freeware `logger9.dll` and `loggerX.dll` modules.  
This is an incredibly useful application – it can do much more than just save and recall files.  
Please read the documentation provided on the website.  
Logger is available from Robbie McElrath at <https://robbiemcelrath.com/fs/logger/about> .