

KR87 ADF Receiver



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Getting Started

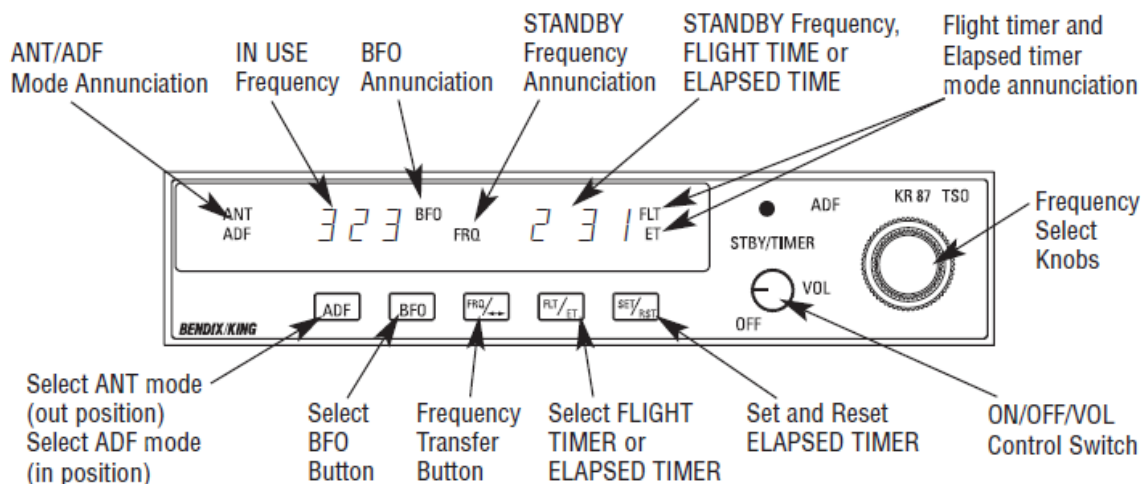
This system utilizes advanced computer technology normally found only in high-end general aviation avionics. It does this by utilizing state of the art computer components. It is strongly recommended that pilots acquaint themselves with the features and controls described in this manual prior to using it in flight.

System Requirements

- Microsoft Flight Simulator X
- Windows XP, Windows Vista, or Windows 7 - 32 or 64 bit versions.

1. Basic Operation

All controls required to operate the KR87 are located on the unit front panel.



DISPLAY TOOLTIPS



In addition to the digital output display, a tooltip over each individual display is available, showing the display data.

This is particularly useful on panels where the gauge is sized very small, and the display may be difficult to read.

TOGGLE RADIO STACK POPUP



In the upper left-hand corner of the unit, a small mouse hotspot can toggle the radio stack popup panel on/off, for convenience.

UNIT POWER

Rotate the ON/OFF/VOL knob clockwise from the "OFF" position. The unit will be activated and will be ready to operate. Rotation of this control also adjusts audio volume. The KR 87 has "audio muting" which causes the audio output to be muted unless the receiver is locked on a valid station.

Note: If the aircraft is already airborne when you select it, and the avionics power is ON, the power will be switched to ON position automatically.



FREQUENCY SELECTION



The active frequency (to which the ADF is tuned) is displayed in the left side of the window at all times. A standby frequency is displayed in the right side when "KHz" is annunciated. The standby frequency is placed in "blind" memory when either FLT (Flight Time) or ET (Elapsed Time) mode is selected.



With "KHz" annunciated, the standby frequency is selected using the *Frequency Select Knobs*, which may be rotated either clockwise or counterclockwise.

The frequency selection of each knob is determined by the *Frequency Scale*. Push the inner knob IN for *Lower Scale*. Press it again and the system returns to *Upper Scale* (normal) mode.

Knob	Lower Scale	Upper Scale
Outer Knob	Changes frequency by 1 KHz	Changes frequency by 100 KHz

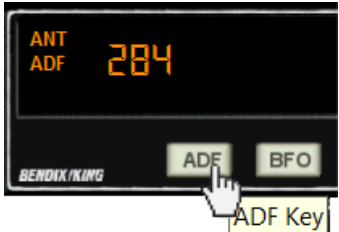
Inner Knob	In BFO Mode, changes frequency by 0.1 KHz	Changes frequency by 10 KHz
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To set the *Selected* (Standby) *Frequency* as the active frequency, press the swap key. This will set the radio receiver to the *Selected Frequency*, and place the former active frequency value in memory as the Standby Frequency.

OPERATING MODES

Antenna (ANT) mode is selected by pressing the “ADF” button. “ANT” will be annunciated in the upper left corner of the display. ANT provides audio reception of the *Morse Identity Code* from the station tuned, and is usually used for identification. Press the ADF key again to return to normal mode.



Note: The “ADF” key on the KMA28 Audio Panel must also be ON in order to hear the audible identification code.

DISPLAY MODES

There are two basic display modes; *Frequency Mode* and *Timer Mode*.

In *Frequency Mode*, the active and standby frequencies are displayed, and the indicator on the right of the display annunciates ‘KHz’.

The *Frequency Select Knobs* will only change the standby (selected) frequency in *Frequency Mode*.

In *Timer Mode*, the active frequency is still displayed, but one of the two timers is displayed on the right. The indicator on the right will annunciate either ‘FT’ (Flight Time), or ‘ET’ (Elapsed Time).



OPERATING THE TIMERS

The flight timer will always be automatically reset to: 00 whenever power is interrupted by either the avionics master switch or the unit’s ON/OFF switch. Always read flight time prior to power shutdown. Flight time or elapsed time are displayed and annunciated alternatively by depressing the FLT/ET button.

Flight Timer



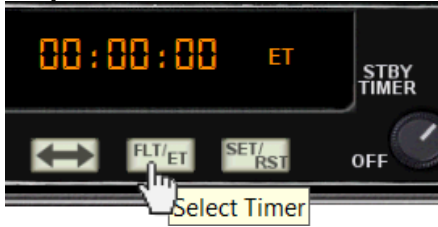
From *Frequency Mode*, press the FLT/ET Key once. The *Flight Timer* will be displayed. ‘FT’ will be annunciated on the display.

The *Flight Timer* starts automatically, provided the unit is already switched on, when the aircraft leaves the ground on takeoff.

The flight timer continues to count up until the aircraft lands, and:

1. The unit is turned off, or
2. Stopped with the ‘SET/RST’ key.

Elapsed Timer



From *Flight Timer Mode*, press the FLT/ET Key once again. The *Elapsed Timer* will be displayed. 'ET' will be annunciated on the display.

The elapsed timer may be reset back to: 00 by pressing the 'SET/RST' button. It will then start counting up again.