# KX 155A & KX 165A Bendix/King NAV/COMM System



TOKIK



Completely redesigned, the Bendix/King Silver Crown Plus<sup>™</sup> KX 155A and KX 165A transceivers combine outstanding capability with such useful features as 32 programmable Comm channels, support for 8.33 kHz Comm channel spacing (8.33 kHz KX165A only), an internal course deviation indicator mode and GPS Quick Tune<sup>™</sup>. Contemporary styling, innovative features and high reliability make the KX 155A and KX 165A the choice for today and tomorrow. (Shown actual size)

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Offering improved ergonomics, our entire line of Silver Crown Plus avionics features more extensive control backlighting and larger, sturdier knobs for easier use.



# **A Tradition Of Quality**

With a new feature set, new appearance and new functions, the Bendix/King Silver Crown Plus KX 155A and KX 165A Nav/Comms still share a rich tradition of performance, value and reliability with their predecessors, the KX 155 and KX 165. Completely redesigned, the KX 155A and KX 165A update the concept of the combined navigation and communications radio for the 21st Century. With such features as programmable Comm channels, support for 8.33kHz Comm tuning (8.33 kHz KX 165A only), GPS Quick-Tune, a series of different operation modes, remote channel increment with flip-flop tuning—a Bendix/King innovation—and a built-in timer, the KX 155A and KX 165A match their modern appearance with vastly improved capability.

# **Enhanced Performance**

In addition to their standard use—offering both active and standby navigation and communications frequencies—the KX 155A and KX 165A incorporate a number of new control features. These include the provision to program up to 32 Comm channels, enabling you to store and readily recall the frequencies you use on a regular basis. Pre-selected frequencies are stored in a non-volatile memory circuit, eliminating the need for backup battery power. When interfaced to the KLN 94 GPS, both the standby Comm and Nav frequencies can be selected and remotely tuned from the GPS database, reducing pilot workload.

The units' remote channel increment capability (with flip-flop tuning) allows you to change channels without taking your hands off the yoke—a feature of special interest to helicopter operators. The stuck microphone alert is a safety enhancement as well as a convenience for you and the people you communicate with; in addition to notifying you of a problem, the KX 155A or KX 165A's Comm transmitter will automatically shut down if their microphones are keyed continuously for more than 33 seconds.

Other new features include a bearing-to-station mode and a radial-



from-station mode. An internal Course Deviation Indicator (CDI) has been included for those times when an external CDI is being driven by your GPS receiver, and the systems now include a handy elapsed-time and approach timer. The KX 165A features a built-in VOR/LOC converter, enabling it to directly drive a horizontal situation indicator (HSI).

The timer function provides you with a "stopwatch", ideal for timing a holding pattern, a non-precision approach or an individual trip leg. The timer can be programmed to count either upwards or downwards.

# **A New Look And Feel**

Matching our other Silver Crown Plus avionics, the KX 155A and KX 165A feature a new faceplate for a more contemporary look. More than just a styling update, this change helps improve ergonomics and makes these capable systems easier to operate.

For example, backlighting of the bezel nomenclature and knobs is now standard, speeding recognition and making night flying even easier. We also improved the control knobs and buttons, providing a sturdier feeling and a greater sense of precision, for a difference you'll both notice and appreciate.

Too, both units' displays double the amount of available presentation space, from one line of text information to two. Incorporating our proven large, self-dimming gas discharge displays, the units' readouts give you access to all 200 Nav and 760 Comm frequencies (2,280 Comm frequencies with the 8.33 kHz KX 165A), along with their optional 40-channel glideslope.

# **Backed By The Best**

Like our other panel-mounted avionics, the KX 155A and KX 165A are backed by our comprehensive two-year "no-hassle" warranty. And wherever you fly, you'll never be far from one of our 800 authorized service centers worldwide—the most extensive and responsive support network in general aviation.

Combining improved ergonomics, enhanced performance, a host of usable new features and legendary Bendix/King reliability, the Silver Crown Plus KX 155A and KX 165A offer the value and capability you expect from the leader in panel-mounted avionics.



The KX 155A & KX 165A incorporate five different NAV operating modes which can be changed by simply pressing the NAV Mode button.

# About The KX155A and KX165A

**ON/OFF/VOLUME KNOB** – This knob activates the unit and adjusts the COMM volume to the desired listening level.

**COMM DISPLAY** – The left portion of the digital display is allocated to the active and standby COMM frequencies. A lighted 'T' signals a transmission is in progress; an 'R' shows the unit is in the 'Receive' mode.

**COMM FREQUENCY SELECT KNOBS** – These two concentric knobs control frequency, with the outer knob controlling MHz adjustments and the inner one kHz adjustments.

**COMM TRANSFER BUTTON** – This button transfers the active and standby frequencies on the display.

**CHANNEL BUTTON** – This button is used in conjunction with the COMM Frequency Select knobs to access up to 32 pilot-programmable COMM channels.

**NAV DISPLAY** – The right portion of the digital display is allocated to the active NAV frequency and a choice of additional navigation data.

**NAV FREQUENCY SELECT KNOBS** – These two concentric knobs control frequency, with the outer knob selecting 1 MHz and the inner 50 kHz increments.

**NAV TRANSFER BUTTON** – This button transfers the active and standby NAV frequencies, or resets and starts the timer (in timer mode).

**NAV MODE BUTTON** – Pressing this button causes the NAV display to change from the Active/Standby format to the Active/CDI format, permitting the OBS (Omni Bearing Selector) display to be shown. Further presses cycle the display to the Active/Bearing, Active/Radial and Timer modes.

NOTE: For specific operating information, consult the Silver Crown Plus Pilot's Guide, Part Number 006-18110-0000. TSO'd NAV Indicators suitable for use with the KX 155A and KX 165A include:



The KI 208 (shown) and KI 209 feature pivoted meter movements, with the KI 209 incorporating a glideslope needle



The KI 208A and KI 209A (shown) are similar to the KI 208 and KI 209 but add an interface to the KLN 89/89B and KLN 94 GPS receivers.



The KI 203 and KI 204 (shown) feature a rectilinear meter movement with a built-in VOR/LOC converter, with the KI 204 incorporating a glideslope needle. (For use with the KX 155A).

The KI 206, used with the KX165A, is similar in appearance to the KI 204 but requires input from an external VOR/LOC converter.



The KI 525A Horizontal Situation Indicator is part of the KCS 55A Compass System. It combines heading and VOR/LOC/GS information in a single presentation (requires a KN 72 VOR/LOC converter when interfaced to the KX 155A).

# **KX155A and KX165A Specifications**

TSO Compliance: COMM Transmitter: C37d COMM Receiver: C38d NAV Receiver: C40c, C36e VOR/LOC Converter: C40c, C36e (KX 165A only) Glideslope Receiver: C34e Environmental Categories: DO-160c, A1D1/-BA/BMNPS/XXXXXZB/AB/BATAXXX (KX 155A) DO-160c, A1D1/-BA/BMNPS/XXXXXAB/AB/BATA/A3E3/XX (KX 165A)

#### **Physical Dimensions:**

Height:	2.00 in. (5.08 cm)
Width:	6.25 in. (15.87 cm)
Length:	10.16 in. (25.81 cm)
Weight (incl. GS):	4.2 lbs. (1.9 kg) (KX 155A)
Ū.	4.0 lbs. (1.81 kg) (KX 165A)
Power Requirements:	27.5VDC, Receive, .6A, Transmit,

Power Requirements:27.5VDC, Receive, .6A, Transmit, 6.0AMax. Altitude50,000 ft.Temp. Range-20° to +55° C.

### **Communication Transceiver**

 Frequency Range:
 118.000 MHz to 136.975 MHz in 25 kHz increments

 118.000 MHz to 136.9916 MHz in 8.33kHz increments (118.000 – 136.990 displayed per DO 186b and ED-23B) (8.33 kHz capable KX 165A only)

 Frequency Stability:
  $\pm 0.0008\%$  (25 kHz versions)

  $\pm 0.0003\%$  (8.33 kHz KX 165A only)

 Transmitter Output:
 10W minimum

 Sidetone Output:
 Adjustable to 100mW into 500Ω headphones

### **Navigation Receiver**

Frequency Range:108.00 MHz to 117.95 MHz in 50 kHz incrementsVOR/LOC Sensitivity: $2\mu V$  (hard) or less on all channels for half flag deviationAudio Output:With a 1 kHz tone 30% modulation at least 100mW output into 500 $\Omega$  loadDME Channeling:Serial DME channeling provided for KN 62A, KN 63, KN 64, KDM 706/706A

# **Glideslope Receiver**

Number of Channels:40 at 150 kHz spacingFrequency Range:329.15 MHz to 335.00

**ge:** 329.15 MHz to 335.00 MHz

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**Policy Notice:** Avionics installations require special skills, tools and test equipment. Our limited warranty is valid only for equipment installed in accordance with our sales and service policies.

In keeping with our policy of continual product improvement, designs and specifications described here may be altered without notice.

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