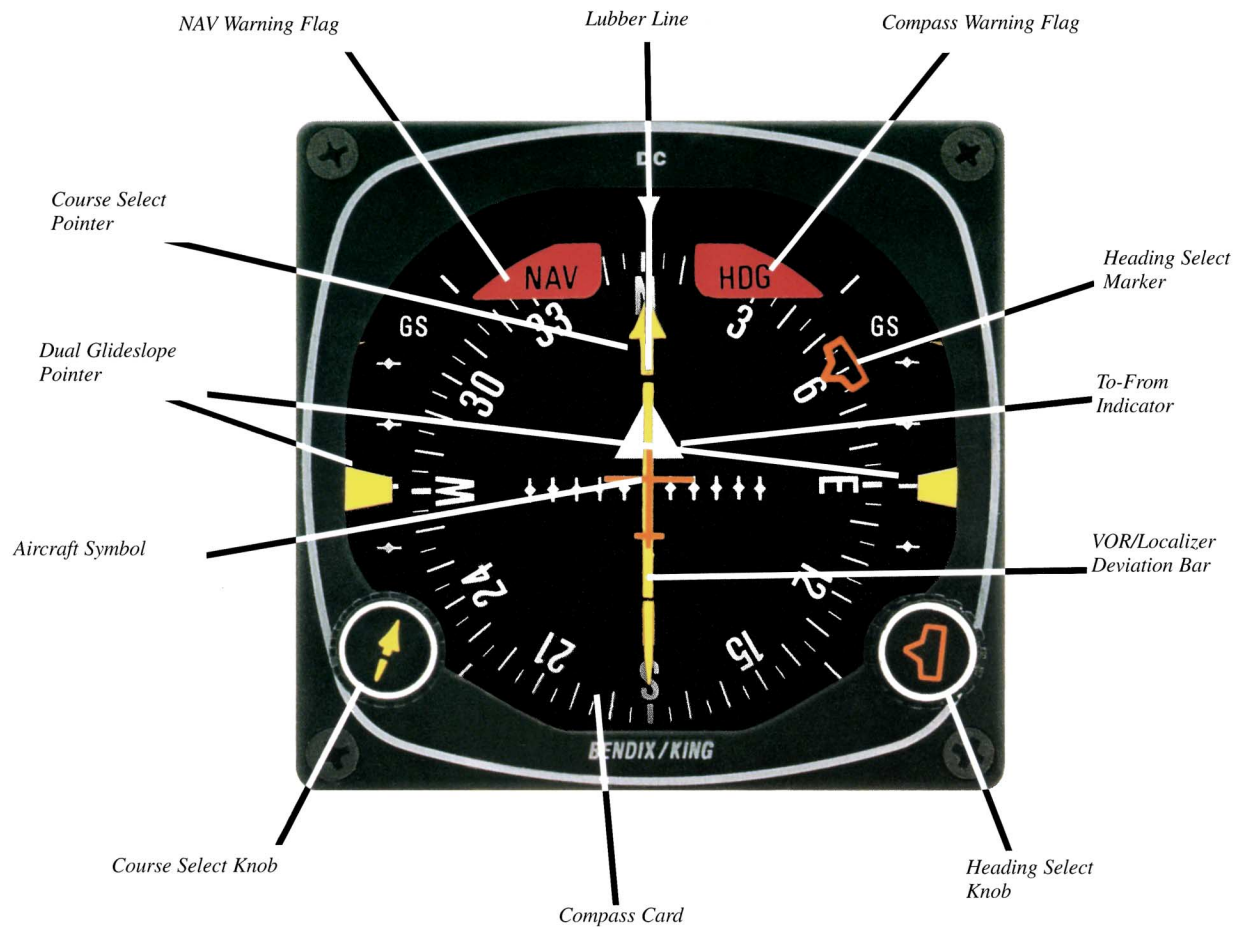


**KCS 55A
Bendix/King
Compass System
with HSI Indicator**



Pointing The Way



The remote-mounted KCS 55A Compass System is an affordably-priced automatic slaving compass system. As with more expensive units, the KCS 55A automatically displays precise aircraft magnetic heading. No manual setting of the compass card is required.

The system is built around the KI 525A Horizontal Situation Indicator (HSI), a panel-mounted display weighing less than 4 lbs. The KI 525A replaces the aircraft's standard Directional Gyro and the number one Course Deviation Indicator (CDI), as it incorporates this information.

Magnetic Heading and VOR or LOC course information is combined on the HSI in a pictorial symbolic presentation of the complete navigation situation. The unit thus simplifies VOR/LOC course orientation, intercept and tracking as it relieves the pilot

of the chore of integrating information from two instruments.

In addition, the internally-lighted KI 525A HSI includes dual glideslope pointers, which are in view only during an ILS approach. En route, the pointers are kept out of view, leaving an uncluttered presentation.

Display elements include:

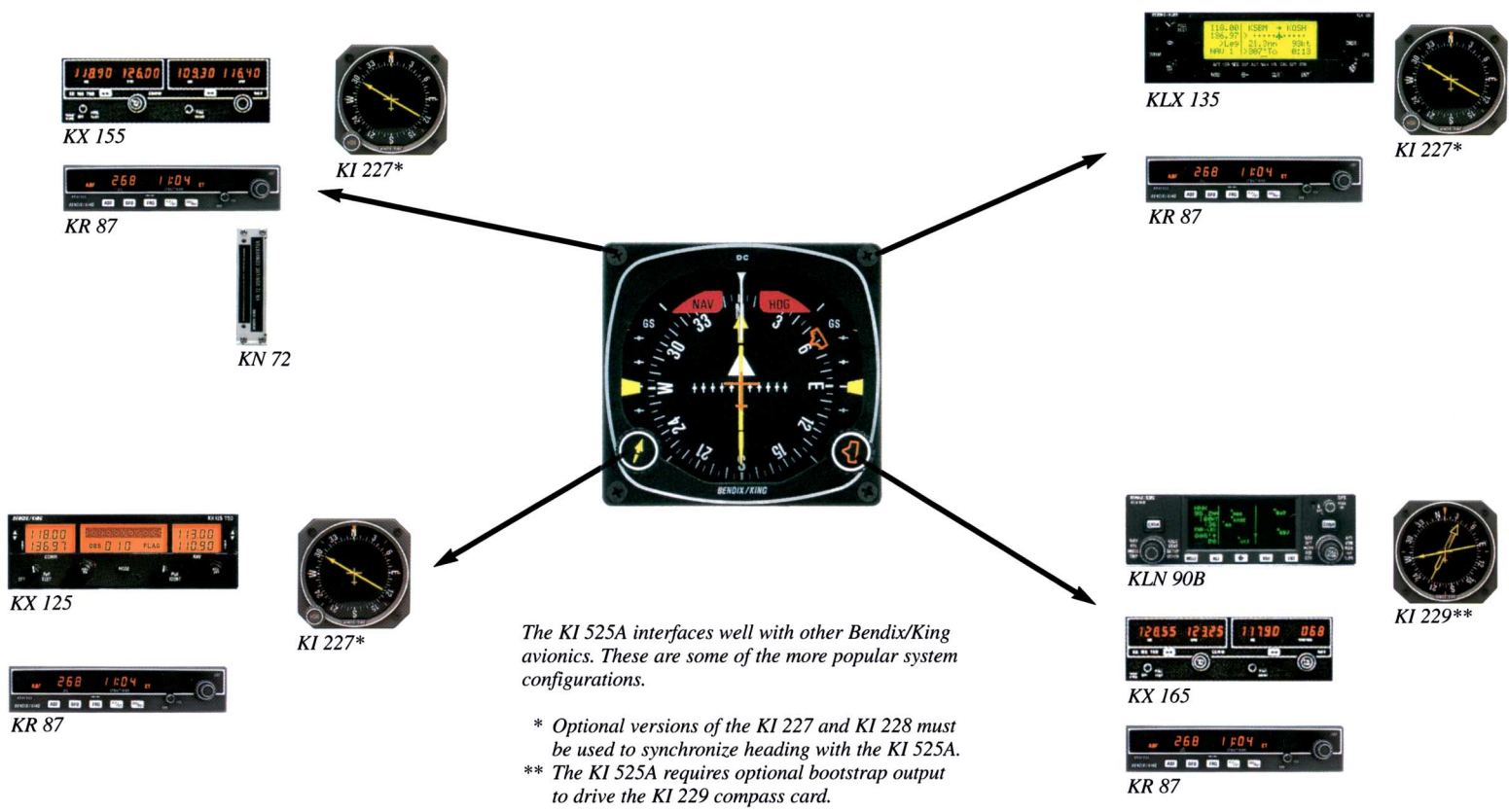
- Slaved gyro magnetic heading
- Selected heading
- Selected VOR/GPS/RNAV or LOC course
- GPS/RNAV/VOR/Localizer deviation
- TO/FROM, GPS/RNAV or VOR indicator
- Glideslope deviation

In addition, the KI 525A provides selected heading and course outputs for Bendix/King Flight Control Systems,

including the KFC 275, KFC 250, KFC/KAP 200, KFC/KAP 150, KAP 150H and KAP 100. An optional heading output is available for driving an RMI or other accessories. (See the table on the back for a list of KCS 55A system interfaces with other popular autopilots.)

When coupled to an autopilot, the KCS 55A can be interconnected to provide automatic disengagement of the autopilot when the "HDG" flag comes into view.

The KA 51B Slaving Control and Compensator Unit provides selectable "slaved gyro" or "free gyro" modes. Manual slaving capability is available when the system is in "free gyro" mode, while a visual meter displays the slaving error. The KA 51B is also internally lighted.



- 1.
- 2.
- 3.
- 4.
- 5.

The KCS 55A System

The KCS 55A system typically incorporates four components, including the KI 525A HSI (1); the remote-mounted KG 102A Directional Gyro (2); the remote-mounted KMT 112 Magnetic Slaving Transmitter (3); and the panel-mounted KA 51B Slaving Control (4) and Compensator Unit. The optional remote-mounted KA 52 or KA 57 Autopilot Adapters (5) are available to convert DC heading and course data signals into AC signals compatible with autopilots or flight director systems manufactured by other companies.

A Matching Horizon

The KI 525A HSI can be teamed with our affordable KG 258 Horizon (shown here) to provide a complete primary flight display. The KG 258 air-driven artificial horizon with electrical pitch and roll outputs is specifically designed for use with most Bendix/King autopilots. When a flight control system is not available, the KG 259 Horizon (identical in appearance) can be substituted.

Specifications

KCS 55A Compass System with KI 525A HSI Indicator

TSO Compliance:

TSO C6c

RTCA Environmental Categories

KI 525A, KA 51B: DAMAAAXXXXXX

KG 102A, KA 52,

KA 57: BAJAAAXXXXXX

KMT 112: BASAAAXXXXXX

System Accuracy: Accurate to within
2 degrees of local magnetic heading.

Power Requirements:

13.75VDC (15.8 max.) 3.23 amps
or (11.0 min.)

27.5VDC (31.6 max.) 1.73 amps
(22.0 min.)

Slaving Rate:

Normal: 3 degrees per minute

Fast: 180 degrees per minute

Warm-up Time: Varies from one minute
at +55°C to 5 minutes at -46°C.

Altitude: - 1,000 to +40,000 feet

KI 525A

Size: 3.375 x 3.550 x 7.305 inches,
nominal (8.57 x 9.02 x 18.55 centimeters)

Weight: 3.94 pounds (1.786 kilograms)

KG 102A

Size: 5.370 x 7.790 x 4.290 inches, nominal
(13.64 x 19.79 x 10.90 centimeters)

Weight: 4.3 pounds (1.95 kilograms)

KMT 112

Size: 3.37 in. dia. x 1.81 in. high,
nominal (8.55 cm. dia. x 4.64 cm. high)

Weight: 0.3 pounds (150 grams)

KA 51B

Size: 1.20 x 2.12 x 3.00 inches, nominal
(3.05 x 5.38 x 7.62 centimeters).

Vertical or horizontal mount available.

Weight: 0.2 pounds or .09 kg

KA 52 and KA 57

Size: 1.259 x 3.172 x 4.016 inches,
nominal (3.20 x 8.06 x 10.20 centimeters)

Weight: 0.4 pounds (170 grams)

KCS 55A AUTOPILOT INTERFACES

| Autopilot Type | Autopilot Computer or Radio Coupler | Required KCS55A Autopilot Coupler |
|---|---|--|
| | Radio Coupler | Coupler |
| Century (Formerly Edo/Mitchell) | Radio Coupler | KA 57(1) |
| Century II & III and Piper Altimatic III | IC-388 IC-388M IC-388P IC-388C IC-388MC IC-388PC IC-388-3 | KA 57(1) KA 57(1) KA 57(1) KA 57(1) KA 57(1) KA 52 KA 52 |
| Century IV | ARINC ID-496-X1XX2 | |
| Century 21, 31, 41 | IC-930 | None Required |
| Bendix: | Computer | |
| FCS-810 | CA-814A | KA 52 |
| Cessna: | Control/Selector | KA 52† |
| Nav-O-Matic 300 | C-394A | KA 57(2) |
| Nav-O-Matic300A | C-395A | KA 57 |
| Nav-O-Matic 400 | C-520A/B | KA 52 |
| Nav-O-Matic 400 (w/Flt. Dir.) | S-530A | KA 57(3) |
| Nav-O-Matic 400A (wo/Flt. Dir.) | C-530A | KA 57 |
| Nav-O-Matic 400B | CA 550 A/FD | |
| STEC | | |
| All Models | All | None Required |

NOTE: For NAV 1/NAV 2 interconnects, see Installation Bulletin #150.

†KA 52 with external switching relay.

(1) KA 57 used with IC-388 series couplers should have Mod 5 installed.

(2) Wire per I.B. #117 revised. (3) Wire per I.B. #114. (4) See I.B. #151.

BENDIX/KING

Honeywell

23500 W. 105th Street, Olathe, KS 66061
Telephone 913.712.2613 Fax 913.712.5697
Toll-Free in U.S. 877.712.2386
www.bendixking.com