

KT 73

# Data Link Transponder With TIS Capabilities



SEAMLESS SAFETY INTEGRATION THROUGH IHAS

**BENDIX/KING®**

EQUIPPED WITH CONFIDENCE.

# Mode S Data Link Transponder With TIS Capabilities



Shown here displayed on a KMD 250 Multi-Function Display

## INTRODUCING A BETTER TRANSPONDER

The Bendix/King KT 73 Data Link Transponder is an affordable, solid-state, compact general aviation transponder with Mode S capabilities. It also provides Traffic Information Service (TIS) from FAA air traffic control (ATC) radar systems. TIS gives pilots access to information on up to seven nearby aircraft, including each airplane's relative location, direction of flight, altitude above or below the aircraft, and whether it is climbing, descending or at flying level. The KT 73 meets TSO-C112 for Class 2A ATCRBS Mode A/C and Mode S Airborne Transponder Systems.

The KT 73 also meets the European, non-diversity elementary surveillance mandate requirements, including surveillance identifier codes and Flight ID, and is certified to JTSC-2C112a. The KT 73 will be fully field-upgradeable (software only) to include air-to-ground Automatic Dependent Surveillance Broadcast (ADS-B) operation. This transponder function enables aircraft to transmit position, altitude and vector information derived from the on-board GPS system for use by ATC facilities.

A panel-mounted transponder designed for new or retrofit installations, it fits the same mounting rack as our KT 76A/C and KT 70/71 transponders. Rotary knobs allow for easy squawk code entry or changes to your aircraft's flight identification code.

## TRAFFIC INFORMATION SERVICE (TIS)

When interfaced with the Bendix/King KMD 250, 550, 850 or the new KI 825 Electronic HSI,

## Pioneering Transponder Technology

With more than 30 years of experience, Honeywell is the recognized leader in transponder technology. We developed the first solid-state transponders for the airlines and general aviation, the first low-cost general aviation transponder and the best-selling panel-mounted transponder of all time. We pioneered Mode S technology for corporate aviation and introduced the first panel-mounted Mode S transponder, the KT 70. Now, we're pleased to offer you the latest in functional and safety benefits, with the addition of Traffic Information Service (TIS) to our suite of transponder capabilities.



the KT 73 will display traffic using the FAA's Mode S secondary surveillance radar system, which contains the surveillance data as

well as the data link required to "uplink" relative traffic information to the aircraft. The KT 73 enhances pilot "see and avoid" safety and efficiency in flight, through display of nearby traffic and potential conflict situations. This system is intended to "assist" the pilot in visual acquisition of nearby aircraft. Bendix/King displays also feature patent pending, smoothing algorithms which improve traffic update accuracy during aircraft maneuvers and between radar scans, and will enhance presentation of the intruder aircraft's relative position to KT 73 equipped aircraft.

The KT 73 TIS information displayed includes relative position, altitude, bearing and altitude trend information for up to eight transponder-equipped intruder aircraft out to seven nautical miles and 3,500 above or 3,200 feet below the aircraft. TIS coverage extends up to 55 nautical miles from the radar site. The free-of-charge TIS surveillance data is uplinked to the aircraft every 4.7 seconds following radar scan. TIS service coverage is available in most major U.S. cities.



## A PILOT-FRIENDLY DESIGN

The KT 73 features an easy-to-read gas-discharge display offering encoded altitude and assigned code information simultaneously.

Pushbutton selection of VFR code and Remote-Ident switching help reduce pilot workload. Built-In Test Equipment provides continuous self-test capability. In addition, the KT 73's surface mount technology construction provides outstanding reliability. The KT 73 is TSO'd as a C112 Class 3A transponder and is suitable for use at up to 50,000 feet (15,240 meters).



## KEY FEATURES OF THE KT 73

Enhanced safety, operating efficiency and information-exchange capacity – the KT 73 offers everything you need for better transponder performance in today's increasingly crowded airspace.

### ■ TIS CAPABILITIES

The KT 73 TIS information displayed includes relative position, altitude, bearing and altitude trend information for up to eight transponder-equipped intruder aircraft out to 7 nautical miles, and 3500 above or 3,200 feet below the aircraft.

### ■ IDENT BUTTON

Marked IDT, the KT 73's Ident button is pressed when ground control requests an "Ident" or "Squawk Ident" from your aircraft. The IDT nomenclature is lit during Ident.

### ■ ID CODE

The ATCRBS Transponder Identification code (squawk code) for the aircraft is displayed in the Ident Window on the right side of the display. Each of the four Transponder Code Selector Knobs selects a separate digit of the identification code.

### ■ REPLY

The lighted "R" reply indicator blinks when the transponder is replying to a valid interrogation.

### ■ ALTITUDE DISPLAY

The KT 73 displays Flight Level Altitude, marked by the letters "FLT" and a number in hundreds of feet, on the left side of the display.

### ■ VFR

The VFR Pushbutton recalls the preprogrammed VFR code, superseding whatever code was previously entered.

### ■ FUNCTION SELECTOR KNOB

The Function Selector Knob on the right side of the KT 73 enables you to choose from among the following operating modes:

#### • OFF

The unit is not receiving power.

#### • FLT ID

In this position, the unit displays the aircraft's flight identification code and allows it to be changed. The unit does not transmit in this mode.

#### • SBY (STANDBY)

In Standby, the unit is energized but is inhibited from transmitting.

#### • TST (TEST)

Replies are disabled in test mode, and the unit illuminates all segments of the display for at least four seconds.

#### • GND (GROUND)

The KT 73 will inhibit ATCRBS (Air Traffic Control Radar Beacon System), ATCRBS/Mode S All Call and Mode S-Only All Call replies. However, the unit will continue to generate Mode S squitter transmissions and reply to discretely addressed Mode S interrogations.

#### • ON

The KT 73 is able to reply to all valid Mode A, C and S interrogations, with altitude information suppressed.

#### • ALT (Altitude)

The KT 73 will reply to all valid Mode A, C and S interrogations with altitude information enabled.



*IHAS 2000*

## *The IHAS Connection*

While the KT 73 Mode S Data Link Transponder is a powerful safety tool in its own right, as part of the Integrated Hazard Avoidance System (IHAS), its performance is greatly enhanced.

The KT 73 Mode S Data Link Transponder is available as part of the IHAS 2000 system, an innovative, fully integrated solution to meet your safety needs. The KMD 250 Multi-Function Display (MFD) is the cornerstone of the IHAS 2000 family. The KT 73 supplies traffic information, while the KDR 510 VDL Mode 2 Data Link Receiver allows pilots to see graphical NEXRAD, graphical METARs, and text products such as PIREPs and TAFs.

IHAS systems encompass each of the four major airborne safety systems: positioning, weather avoidance, traffic advisories and terrain awareness. All components work together to give you a clear, comprehensive snapshot of conditions affecting your flight – on one easy-to-read multi-function display.

*When it HAS to be clear, it HAS to be capable, and it HAS to be comprehensive ... count on IHAS.*

TRK 140<sup>0</sup>m



## Mode S and TIS Key Benefits

The KT 73 incorporates all of the key benefits of Mode S and TIS technology, providing a direct link between your aircraft and the ground:

- Improved aircraft surveillance and reporting accuracy through the use of a unique address code
- Reduced interference in identity and altitude reporting, an important consideration in today's more crowded ATC environment
- The ability to send and receive data link information - a key benefit soon to be realized with the advent of 'Free Flight', the forthcoming air traffic management environment which offers the freedom to select your own path and speed in real time
- Enhanced pilot "see and avoid" safety and efficiency in flight, through display of nearby traffic and potential conflict situations



## A WORD ABOUT SUPPORT

Like our other avionics, the KT 73 is backed by our comprehensive Bendix/King two-year "no hassle" warranty. And wherever you fly, you'll never be far from one of our 700 authorized sales and service centers worldwide – the most extensive and capable network in general aviation.

## KT 73 DATA LINK TRANSPONDER

Type:	Mode S Level 2 Data Link
TSO:	C112; DO-178B, DO-181B, DO-160D
Weight:	3.63 lbs (1.65kg)
Width:	6.25 in. (15.87 cm)
Height:	1.63 in. (4.14 cm)
Depth:	10.82 in. (27.48 cm)
Voltage (DC):	10-32
Max. Current Draw:	2.5 amperes
Transmitter Power:	200W
Altitude Range:	50,000 ft. (15,240 m)
Temperature Range:	-20° to + 55° C.
Cooling Requirement:	Optional
Compliance:	ED-73A (February 1999) and ICAO Manual on Mode S Specific Services (First Edition, 1997)



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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 may be altered without notice.

**Honeywell**  
23500 W. 105th Street, Olathe, KS 66061-1950  
Telephone 913.712.2613 Fax 913.712.5697  
Toll-Free in U.S. 877.712.2386  
[www.bendixking.com](http://www.bendixking.com)  
[bendix.king@honeywell.com](mailto:bendix.king@honeywell.com)

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