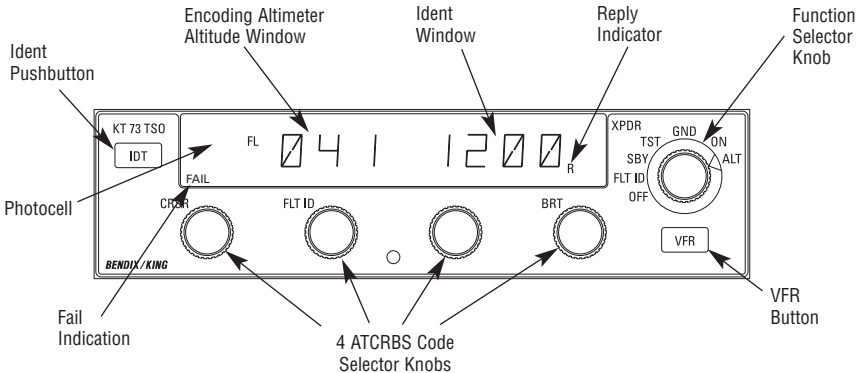


KT 73 Mode S, Datalink Transponder

Operating the KT 73



IDENT Button

Marked IDT, the KT 73's Ident button is pressed when ATC requests an "Ident" or "Squawk Ident" from your aircraft. When the Ident button is pressed while in the GND, ON or ALT modes, "IDT" will be illuminated on the display for approximately 18 seconds. An optional Remote Ident switch may also be installed to perform the same function.

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 INDICATOR

When the KT 73 is replying to a valid ground Mode S interrogation, the reply nomenclature "R" will be illuminated twice per second. When the KT 73 is replying to a valid ATCRBS or airborne Mode S interrogation, the reply nomenclature "R" will be illuminated once per second.

ALTITUDE DISPLAY

When the ALT mode is selected, the KT 73 displays the current Flight Level, marked by the letters "FL" and a number in hundreds of feet. This is shown on the left side of the display. For example, if "FL 071" is displayed, this corresponds to a reported pressure altitude of 7,100 feet. Note that the displayed Flight Level, or pressure altitude, may not agree with the aircraft's baro-corrected altitude under non-standard conditions. The Flight Level, or pressure altitude, reported by the KT 73 will be corrected as required by the ATC facility.

A fault in the altitude interface or an invalid altitude input to the KT 73 will cause the display to show a series of dashes when the KT 73 is in the ALT mode.

VFR

Momentarily pressing the VFR Pushbutton recalls the preprogrammed VFR code, superseding whatever code was previously entered. If the VFR Pushbutton is pressed inadvertently, the previous code may be retrieved by

pressing the VFR button and holding it for two seconds.

If a preset VFR code other than the factory-set 1200 is desired, a new code may be programmed as follows:

1. Place the unit in Standby (SBY)
2. Select the desired VFR code
3. While holding the IDT (Ident) button in, momentarily press the VFR button.

FUNCTION SELECTOR KNOB

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

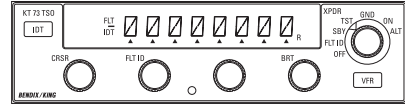
OFF - The unit is not receiving power. When the unit is turned to another mode, it will reply or squitter within two seconds, according to the selected mode.



FLT ID (FLIGHT ID) - The Flight ID should be the aircraft identification employed in the flight plan. When no flight plan is available, the registration marking of the aircraft should be used. When the FLT ID mode is selected, the KT 73 is inhibited from replying to any interrogation, "FLT ID" is annunciated on the display and the flight ID is displayed. The Flight ID is modified by rotating the CRSR knob to position the cursor (▲) under the character to be changed then rotating the FLT ID knob to select the desired character. Once the CRSR and FLT ID knobs have been idle for 5 seconds or the mode select knob has been turned to the SBY position the flight ID will be saved.



SBY (STANDBY) - In Standby, the unit is energized but is inhibited from replying to any interrogation. "SBY" is shown on the left side of the display and the ID code is shown on the right.



TST (TEST) - Replies are disabled and all display segments are illuminated for at least four seconds. A series of internal tests is performed to check the KT 73's integrity, verifying all aircraft specific configuration data and make hardware and squitter checks. If no faults are detected, "TEST OK" is displayed and an audio message "TEST OK" is annunciated, if the audio function is installed.

The audio volume is set during installation. Contact your avionics installer to adjust the volume level to your personal preference.

Should a fault be detected, "SBY" will be displayed on the left and the display on the right will cycle through all the detected faults. If the faults are associated with external data, an audio message "CHECK FAULT CODES" will be annunciated. Faults internal to the KT 73 will annunciate an audio message "TRANSPONDER TEST FAIL". Internal faults will also cause "FAIL" to be annunciated in the lower left of the display in any mode of operation.

The fault codes are as follows:

- F1YY* - Squitter (Internal)
- F2YY* - Internal or External EEPROM (Internal)
- F3YY* - Hardware (Internal)
- F401 - Mode S address/Max Airspeed (Internal)
- F5YY* - Gilham or Executive (External)
- F6YY* - Interface (External)

* YY denotes the specific fault.

Except for the acquisition data fault (code 101), the KT 73 will not inhibit replies when an internal fault is identified.



GND (GROUND) - The KT 73 will inhibit ATRCBS (Air Traffic Control Radar Beacon System), ATRCBS/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. The ID code is shown on the right side of the display and the letters "GND" are shown on the left side.

Note: An optional remote "air/ground" switch may be installed. This feature eliminates the need to manually place the KT 73 in the GND mode. In addition, when the aircraft is airborne, the KT 73 will function as though the Function Selector Knob is in the ALT position when it is actually in the GND position.



ON - The KT 73 is able to reply to all valid Mode A, C and S interrogations. However, the altitude information will not be transmitted. In the ON mode, the altitude window is left blank and the ID code is shown on the right side of the display.



ALT (ALTITUDE) - The KT 73 replies to all valid Mode A, C and S interrogations. The ID code is displayed in the

right window and altitude information (in hundreds of feet) is shown on the left. The letters "FL" will be illuminated, indicating Flight Level. If altitude information is unavailable or invalid, the left portion of the display will be dashed.

DISPLAY BRIGHTNESS ADJUST-

MENT - The KT 73's display brightness is controlled by an ambient light sensor. In addition, it has a manual adjustment to allow for matching to the brightness of other lighted displays that may be in the cockpit. The display is adjusted in the test (TST) mode.

To manually adjust the display brightness, perform the following operations:

1. Turn the Function Selector Knob to "TST".
2. Turn the BRT knob clockwise to increase the display brightness, or counterclockwise to decrease the display brightness.

The eight carets below the alphanumeric display characters indicate the brightness setting (relative to the photocell reading). Maximum brightness is indicated by all eight carets being illuminated. Minimum brightness is indicated by no carets being illuminated. The factory default setting is represented by four carets being illuminated. Pressing the IDT button will return the brightness to the default factory value.

3. Turn the Function Selector Knob from TST to store the display brightness settings.

NOTE: If power is removed from the KT 73 while still in the test mode, the brightness setting will be lost and the unit will revert to the last known setting.