Using Altitude Hold

Altitude Hold helps you maintain a constant altitude. The current pressure altitude is stored as a reference and is the displayed value unless Altitude Hold is activated. The hold altitude is displayed in 100-foot increments. The displayed altitude is the same as is sent for Mode C interrogation replies. When the **HLD** button is pressed, the altitude display will be set to "+ 000." The altitude display values will increase/decrease as the aircraft changes altitude. The altitude display will flash when the aircraft change in altitude exceeds the selected threshold.

Setting the Hold Altitude

1. Press the **HLD** button to set the current altitude as the hold altitude. The LED above the **HLD** button will light to indicate Altitude Hold is active.
2. The Altitude display now shows a value that is relative to the hold altitude in 100-foot increments. A displayed value of + 001 means you are 100 ft above the hold altitude.

Setting the Altitude Hold Buffer

1. Set the Altitude Hold Buffer value by pressing the **HLD** button for two seconds, or longer. Select a value between 200 and 2500 feet. The factory default value is 300 feet. The value is retained when the SL70 is turned off.
2. Turn the **SMALL** knob to change the buffer value, such as ± 02. Press **HLD** again to save the value.

Displays

Squawk Codes

The four-digit squawk code is shown on the left side of the display.

Altitude

The Altitude display is used to show the pressure altitude, Hold Altitude, and Hold Altitude buffer with 100 ft resolution.

UPS Aviation Technologies SM
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Apollo®
Mode C Transponder

Model SL70

Operation Manual

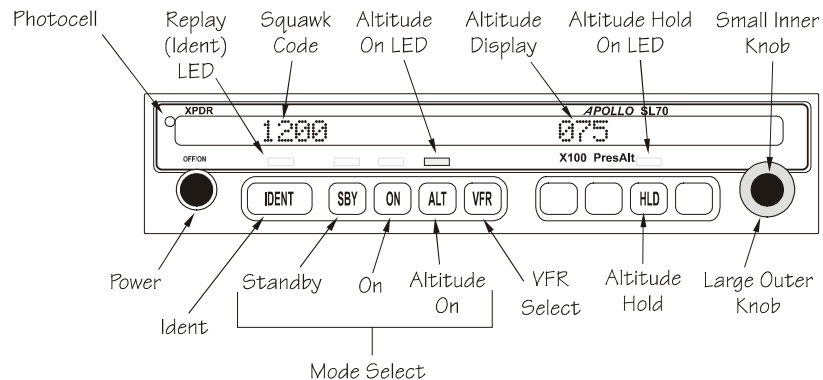**UPS Aviation Technologies** SM
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Apollo SL70

The Apollo SL70 Mode C Transponder complements the Apollo SL series of slimline avionics. The SL70 provides Mode A/C functionality certified to TSO-C74c Class 2A meeting VFR and IFR requirements, operates on 10-35 VDC, includes squawk code display and selection, standby, altitude, and ident operation. All of these features are contained in the space-saving 1.3"H x 6.25"W form factor, with bright easy-to-read LED characters, and user-friendly operation. A photocell on the front of the SL70 adjusts the LED intensity for ambient light conditions. The SL70 will automatically test its receive function if no interrogations have been received in the last 30 seconds.

Knobs

A single knob on the left side controls power on/off. Rotate the knob clockwise to turn transponder power on. Rotate the knob counterclockwise to turn power off.

Dual concentric knobs on the right side are used to select squawk codes and change altitude values. Turning the large, outer knob moves the cursor to allow editing of the selected character. Turning the small, inner knob changes values.

Pushbuttons

Press the pushbutton once to activate the selected operation. An LED above each pushbutton will light when that button is pressed.

IDENT

Press the **IDENT** button once to reply with an identifying squawk code, Ident mode. In Ident mode, the Reply LED will be lighted for 20 seconds. The Reply (Ident) LED will also flash when the SL70 generates transponder replies.

SBY

Press **SBY** to place the transponder in "Standby" mode. The SL70 is "on," but no information will be transmitted.

ON

Press for Mode A operation. The SL70 is "on" and will transmit its squawk code when interrogated.

ALT

Press for Mode C operation. The SL70 is "on" and will transmit its squawk code and altitude when interrogated.

VFR

Press **VFR** once to set the VFR squawk code. Press **VFR** a second time to toggle between the VFR squawk code and the previously entered code.

HLD

Press to enable/disable altitude hold. The LED above the **HLD** button is lighted when altitude hold is enabled.

Selecting a Squawk Code

The selected squawk code will always be in use. As you change a squawk code, the original code will be sent until you are finished selecting the new code. When changing a code, the display will stop flashing and selection is stopped if the controls are not used for three seconds or more. Pressing any pushbutton will also end code selection. The squawk code is automatically reset to the VFR code when the SL70 is turned back on.

1. Rotate the **LARGE** knob clockwise one position. The first character of the squawk code will flash.

2. Rotate the **SMALL** knob to the desired number for the first digit.

3. Rotate the **LARGE** knob to move the cursor to the next desired digit. Turn the **SMALL** knob to select the desired number.

4. Repeat step 3 for each of the desired digits.

5. After the last digit is selected, rotate the **LARGE** knob clockwise one more position. The display will stop flashing and the new code will be sent.

Special Squawk Codes

1200 – Default VFR code in the USA.

7500 - Hijacking

7600 – Loss of communications

7700 – Emergency

See the Airman's Information Manual for more information about squawk codes.