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1D960

ALTITUDE PRESELECT & ALERTER

PILOT'S OPERATING HANDBOOK



68S1092
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1D960 ALTITUDE PRESELECT/ALERTER

SPECIFICATION SHEET

1. **SIZE:** Instrument panel 9"L X 3.17"W X 1.45"H. Weight, 1.345 lb., Dot matrix display.
2. **FIVE POSITION SELECT ROTARY SWITCH**
 - A. Altitude Readout
 - B. Radar Altimeter Setting
 - C. Adjustable pixel dimming
 - D. Barometric/Millibar Setting
 - E. Altitude Select/Arm Setting
3. **PRESELECT INPUTS**

Pressure altitude data from encoding altimeter or blind encoder with ATC format (100 ft resolution) or RS-232 serial data (1 ft resolution). Radar altimeter analog output and flag signal (Optional).
4. **RANGE**

Altimeter reading from 0 to 32,000 ft
Radar altimeter from 0 to 2,500 ft (Collins)
Radar altimeter from 0 to 2,000 ft (Bendix/King)
5. **DESCRIPTION OF DISPLAY WINDOW**
6. **Altitude Readout**

Unit display current altitude information from encoding altimeter or encoder. After capture of *selected altitude*, (see 7 below) if aircraft deviates ± 200 ft from altitude, display readout will flash and give one audible tone. If deviation continues beyond 1000 ft, display readout will stop flashing and give two audible tones.
7. **Altitude Select/Arm Setting (Altitude Select)**

Allows selection of desired altitude to the nearest 100 ft. (Altitude Arm) Pressing green arm light will arm unit (if more than 1,000 ft indication from radar altimeter or no radar altimeter installed).

 - A. If aircraft does not start climb/decent to selected altitude within 1 minute of selection, display will flash.
 - B. Upon closure of 1,000 ft from the selected altitude, the display will flash and give two audible tones.
 - C. Upon closure of 200 ft from the selected altitude, the display will stop flashing and give one audible tone.
 - D. At selected altitude, unit will change display to the altitude display and show current encoder altitude.
8. **Radar Altimeter Setting**

Shows current radar altimeter information. (Optional)

 - A. Will accept popular models of Radar Altimeters.
 - B. If no radar altimeter is installed this function has no meaning.

- C. If radar altimeter is installed and indicating less than 1000 ft it will inhibit the ARM function of the preselect.
 - D. If a radar altimeter is installed and an altitude has been selected, a loss of valid flag signal from the radar altimeter will cause the unit to deselect the ARM function and display RAD INVALID (RAD-----) and give three audible tones.
 - E. If altitude is armed and radar altimeter indicates 1000 ft or less unit will give three audible tones and change display to indicate current altitude information from the encoder.
 - F. If the radar altimeter has exceeded its over range scale and the aircraft descends to 1000 ft or less, the unit will give three audible tones and display the current radar altimeter altitude no matter what display mode unit is showing.
9. **Barometric/Millibar Function**
Field programmed to allow setting of current pressure.
- A. Cannot set an invalid setting. Unit will not change from this mode until a valid setting is selected.
10. **DIM Setting**
On initial power up, unit is set to 80% of brightness.
- A. Adjustable dimming from 10% to 100% brightness.
11. **Power up Pre-Test Function**
- A. Shows present unit software programming.
 - B. Performs pixel check.

GENERAL OPERATING PROCEDURES

1. Upon power up, unit will go through it's pretest sequence. Verify unit completes the test and look for any defective pixels.
2. Adjust units display brightness to suit cabin conditions. Set current altimeter reading on unit.
3. Set radar altimeter alert elevation on unit (if radar altimeter is installed).
4. Select desired capture altitude on unit. If radar altimeter is not installed, arming for the desired capture altitude may be accomplished by pressing the arm button. **NOTE: After unit is armed for the desired altitude and a climb or decent is not started within 1 minute display will flash.**
5. When aircraft approaches within 1000 feet of the desired capture altitude, the display will start to flash and give two audible tones (if unit was connected to aircraft's audio panel). When the aircraft approaches within 200 feet of the desired capture altitude, the display will stop flashing and give 1 tone.
6. At the capture altitude, the unit will change display from the armed setting to the altitude read out and display current *encoder altitude*.
7. To change desired capture altitude repeat steps 4 through 6.
8. If unit is connected to the radar altimeter and the aircraft's altitude has exceeded the range of the radar altimeter (depending on model of radar altimeter) and the aircraft's altitude falls below 1000 feet AGL, the unit will give 3 audible tones and display current *radar altitude*.