

Advanced Flight Systems, Inc.

Modification to Eliminate the Calibration Wand

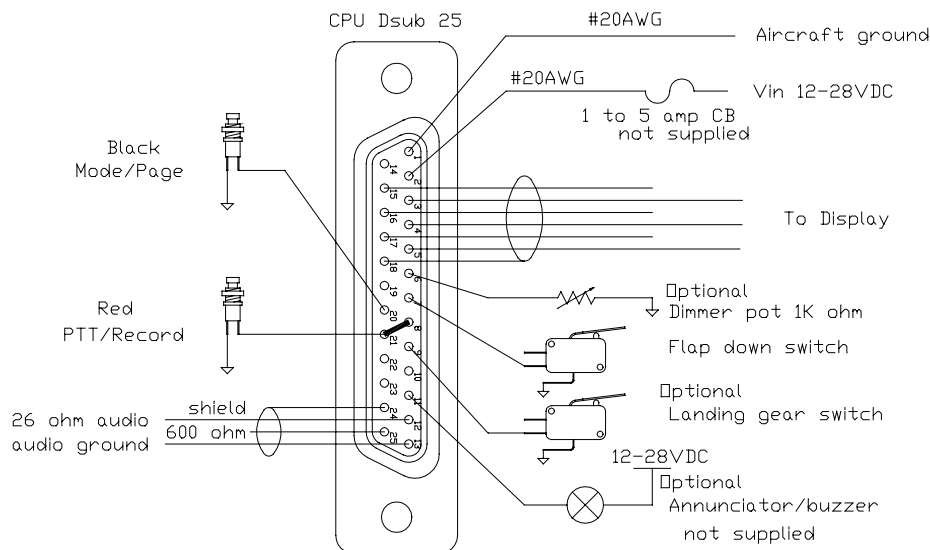
W a n d R e p l a c e m e n t . d o c
April, 2003

The AOA Pro with the 9 pin Dsub connector required a calibration wand for calibration. This document provides instructions how to build a calibration capability into your aircraft eliminating the need for the calibration wand no longer available.

The old AOA Pro usually had a dimmer knob and a black push to test button installed somewhere near the display. To eliminate the need for a calibration wand, one additional push button must be installed and jumper installed in the AOA Dsub connector.

1. Unplug the 25 pin Dsub connector from the AOA CPU. Remove the hood covering the Dsub.
2. Install a jumper between pin 21 and pin 8. Note that pin 21 already has a wire connected to it. Leave that wire connected to pin 21. Add an AWG#22 or 22 conductor to pin 20 of sufficient length to reach a convenient spot on the instrument panel near the AOA display for the mode/page button.
3. Replace the black button with a red momentary push button on the instrument panel. Leave the ground wire connected to the black button and move it somewhere else near the AOA Display (the black button does not have to be on the panel). Connect one of the lugs of the red button to a convenient ground.
4. Move the wire labeled PTT which is wired to the black push button, to the open lug of the red push button just installed.
5. Connect the new wire (from pin 20) to the open lug of the black push button.
6. Plug the Dsub back into the AOA CPU and power it up. The AOA should go through a self-test. Push the red push button and the AOA should go through a self-test again. After the self-test is completed, push the black button. The AOA should now be in the calibration mode and show either 1HC or 0HC to indicate that you are in the calibration mode and on the hangar calibration page. Push the red button. The AOA should shortly show either a 1-- or a 0-- to indicate that the hangar calibration data is being recorded and then move to the next page 1OL or 0OL. The new wiring works. Turn off the power to the AOA so that the data just recorded will not be written to memory. A re-calibration is not required.
7. Reinstall the hood, push buttons and other equipment previously removed.

The red button is now the push to test and record button. The black button is the mode/page button. Use the same checklist if calibration is required.



Jumper between pin 21 and 8
Install additional push button

All wiring #22AWG MS22759 tefzel
except as marked otherwise