

EXP5000

Primary Flight Display Pilot's Guide Addendum



Software Release 8





Document Revision History

Date	Revision	Description
April 27, 2010	00	Initial Release
December 20, 2011	01	Added note for dual PFD, DFC90 configurations
September 19, 2012	02	Edited dual PFD/DFC90 alt bug note to reflect changes made in Rel 8.0.6

This document is applicable to the following Software Part numbers:

Part Number	Title
530-00214-000, -001, -002, and -100	Release 8

This document is applicable to Hardware Part Numbers 700-00006-000, -002, -003, -004, and -100.

This Pilot Guide Addendum supplements the information in the following Release 7 pilot guides which must be retained:

Part Number	Title
600-00104-001	Entegra EXP5000 PFD Pilot's Guide – Piper Meridian
600-00104-002	Entegra EXP5000 PFD Pilot's Guide – Piper Mirage
600-00104-003	Entegra Piper Seneca V and Seminole EXP5000 PFD Pilot's Guide
600-00138-000	Entegra Symphony 160E EXP5000 PFD Pilot's Guide
600-00139-000, -001	Entegra Adam A500 EXP5000 PFD Pilot's Guide
600-00140-000	Entegra Lancair Kit EXP5000 PFD Pilot's Guide
600-00142-000, -001	Entegra Cirrus EXP5000 PFD Pilot's Guide
600-00143-000	Entegra Piper PA28 and PA32 EXP5000 PFD Pilot's Guide
600-00157-000	Envision EXP5000 PFD Pilot's Guide (Aftermarket)
600-00173-000	Entegra Columbia EXP5000 PFD Pilot's Guide

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1. Introduction

1.1 About this Guide

This guide includes information related to the changes in EXP5000 PFD Release 8, or later software from previous software releases. Unless described in this pilot guide addendum, all functions of the EXP5000 PFD remain unchanged. If there are conflicts between the data in the previous pilot's guides and this Release 8 pilot's guide addendum, the data in this addendum should be used.

Note: All images contained within this document, including screenshots and other displays, are for reference use only and are subject to change. The images contained herein may differ slightly from your actual equipment or display.

2. Avidyne DFC90 Autopilot

If the EXP5000 Primary Flight Display (PFD) is installed with an Avidyne DFC90 autopilot this pilot guide section applies. See the *DFC90 Digital Autopilot Pilot Guide* (Avidyne part number 600-00252-000) for more information on autopilot functionality.

The EXP5000 provides the following when installed with an Avidyne DFC90 autopilot:

- Autopilot Annunciations
- Heading and Altitude bugs controlled via the EXP5000
- Indicated Airspeed (IAS) bug controlled via the DFC90
- Vertical Speed (VS) bug controlled via either the EXP5000 or the DFC90
- Flight Director steering command bars

2.1 Avidyne DFC90 Autopilot Annunciations

Autopilot annunciations display left to right across the top of the EXP5000. See *DFC90* Digital Autopilot Pilot Guide for information on the annunciations displayed.

2.2 Avidyne DFC90 Autopilot Bugs

With the Avidyne DFC90 autopilot, four bugs can be used to control the autopilot. The heading bug and altitude bugs can be controlled via the Hdg Bug and Alt Bug buttons on the PFD. The vertical speed bug can be controlled via the VSI Bug button on the PFD or the DFC90 control head. The Indicated Airspeed (IAS) bug can be controlled only through the DFC90 control head.

The IAS bug is displayed on the airspeed tape in a similar fashion to the altitude bug on the altitude tape. Like the altitude, vertical speed, and heading bugs, the IAS bug is solid when the autopilot is coupled to the bug and hollow when the autopilot is not coupled to the bug.

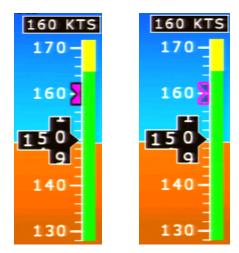


Figure 1: IAS Bug coupled (solid) and uncoupled (hollow)

The current IAS bug value is displayed above the airspeed tape as seen in Figure 1.

With the DFC90 installed, the EXP5000 will have buttons for the heading bug, altitude bug, vertical speed bug, and barometric pressure settings along the right side of the PFD as seen in Figure 2.

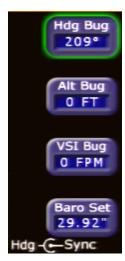


Figure 2: Right side buttons with DFC90

2.3 Avidyne DFC90 Autopilot Modes

See the DFC90 Digital Autopilot Pilot Guide for details on autopilot modes.

Note: In aircraft equipped with dual PFDs and the DFC90 autopilot, due to PFD-to-PFD synching/communication, it <u>may</u> take a 2nd press of the ALT button on the DFC90 control head for the DFC90 to hold current altitude. Altitude captures of target altitudes other than current aircraft altitude are unaffected. This issue was resolved and not longer present in PFD Release 8.0.6 and later.

2.4 AP (Autopilot) and FD (Flight Director) Modes

In Flight Director only mode, "FD" will be displayed in the autopilot annunciation field, the command bars will be visible and green, and you are expected to use the flight controls as required to track the bars until the Aircraft Reference Symbol (ARS) is tucked into the steering command bars.

In full autopilot mode, "AP" will be in the autopilot annunciation field, the command bars will be visible and magenta, and the autopilot will steer the airplane towards the command bars until the ARS is tucked into the steering command bars.

See the DFC90 Digital Autopilot Pilot Guide for more details.

2.5 Flying Approaches with the Avidyne DFC90 Autopilot

See the *DFC90 Digital Autopilot Pilot Guide* for details on how to fly approaches with the DFC90 autopilot.

3. Other Pilot Guide Changes

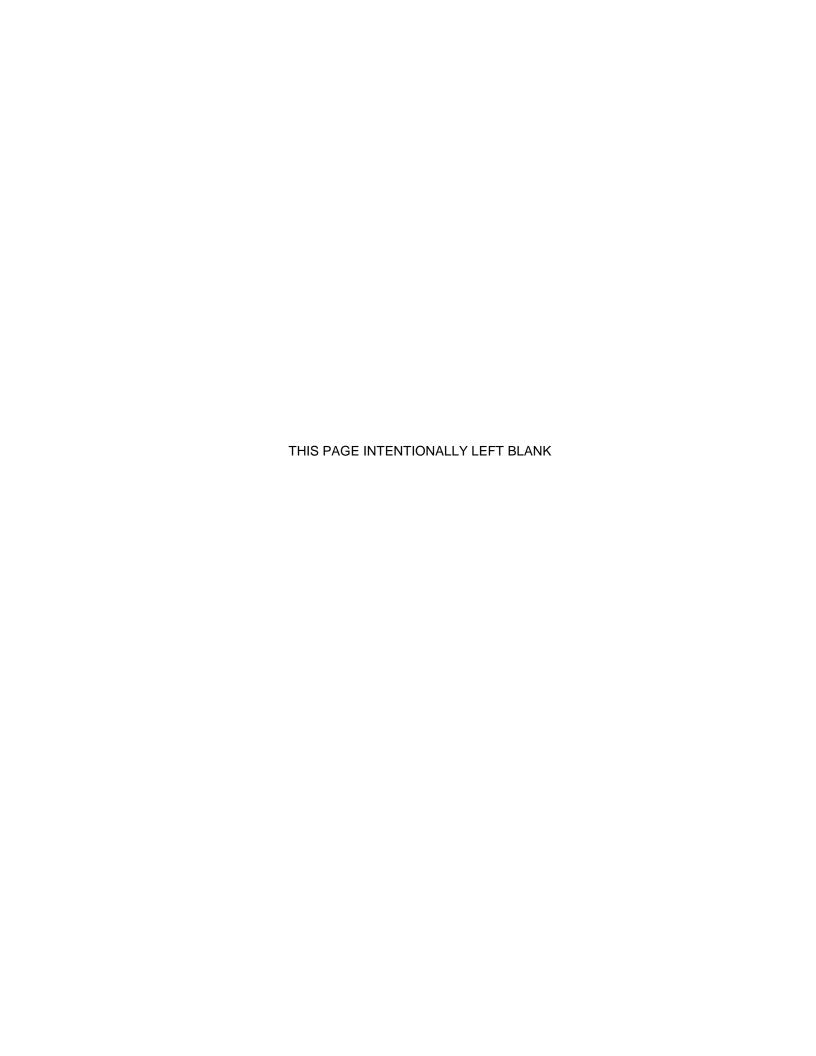
In the 600-00157-000 Envision EXP5000 PFD Pilot's Guide (Aftermarket) in Section 3.9, "Using Other Autopilots with the EXP5000 (PFD 530-00200-() software only)" also applies to 530-00214-() software.

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