

# Entegra

## EXP5000

### Primary Flight Display Pilot's Guide Addendum



## Software Release 8

THIS PAGE INTENTIONALLY LEFT BLANK

## Document Revision History

| Date           | Revision | Description     |
|----------------|----------|-----------------|
| April 27, 2010 | 00       | Initial Release |
|                |          |                 |
|                |          |                 |

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                    |

All materials copyrighted including images that represent this software copyright © 2010 Avidyne Corporation. All rights reserved. All trademarks and trade names are the property of their respective owners. All materials are copyrighted including images that represent this software. Reproduction of this publication or portion thereof by any means without the express written consent of Avidyne Corporation is prohibited. For further information contact Avidyne Corporation, 55 Old Bedford Road, Lincoln, MA 01773, 781-402-7400.

# **1. Introduction**

## **1.1 About this Guide**

This guide includes information related to the changes in EXP5000 PFD Release 8 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 Series of Digital Autopilots 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 Series of Digital Autopilots 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.

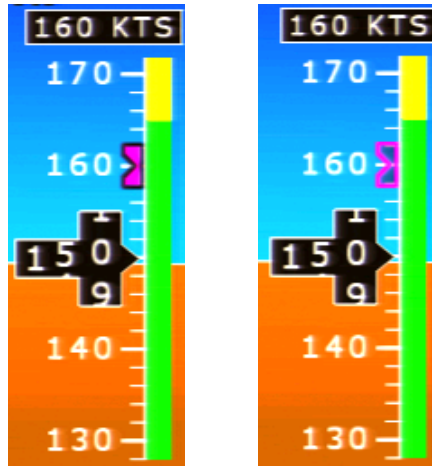


Figure 1: IAS Bug coupled (solid) and uncoupled (hollow)

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.

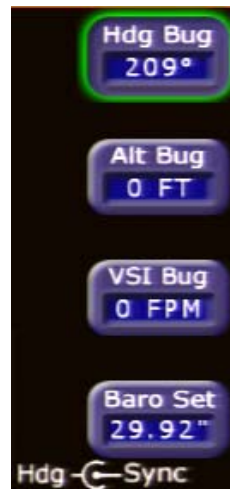


Figure 2: Right side buttons with DFC90

### 2.3 Avidyne DFC90 Autopilot Modes

See the *DFC90 Series of Digital Autopilots Pilot Guide* for details on autopilot modes.

## **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 Series of Digital Autopilots Pilot Guide* for more details.

## **2.5 Flying Approaches with the Avidyne DFC90 Autopilot**

See the *DFC90 Series of Digital Autopilots 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.

### **WARRANTY**

AVIDYNE WARRANTS THE PRODUCT MANUFACTURED BY IT AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF TWENTY-FOUR (24) MONTHS FROM DELIVERY TO THE INSTALLER. A COMPLETE COPY OF THE WARRANTY DATA IS ACCESSIBLE VIA THIS WEB ADDRESS:

[HTTP://WWW.AVIDYNE.COM/PRODUCTS/ENVISION/WARRANTY](http://www.avidyne.com/products/envision/warranty)

### **SOFTWARE LICENSE**

AVIDYNE CORPORATION (“AVIDYNE”) IS WILLING TO LICENSE THIS SOFTWARE, PILOT'S GUIDE, AND RELATED MATERIALS (THE “SOFTWARE”) ONLY ON THE CONDITION THAT YOU AGREE TO THE TERMS OF THE PUBLISHED SOFTWARE LICENSE WHICH CAN BE ACCESSED VIA THIS WEB ADDRESS:

[HTTP://WWW.AVIDYNE.COM/PRODUCTS/ENVISION/LICENSES](http://www.avidyne.com/products/envision/licenses)

THIS PAGE INTENTIONALLY LEFT BLANK



**AVIDYNE CORPORATION**

55 Old Bedford Road

Lincoln, MA 01773

Telephone: +1-781-402-7400

Toll Free: 800-AVIDYNE (800-284-3963)

FAX: 781-402-7599

[www.avidyne.com](http://www.avidyne.com)

P/N 600-00259-000 Rev: 00, April 27, 2010

---