



EFIS-D10
to
EFIS-D10A
Upgrade Guide

*** It is the installer's responsibility to ensure a correct installation. ***

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INTRODUCTION

This short guide gives you the information you need to reinstall your EFIS-D10A after upgrading from an EFIS-D10. The primary differences are the wiring for the EDC-D10A and the encoder output. This guide assumes that you have already installed your EFIS-D10 and are simply making changes to accommodate your EFIS-D10A. If you never installed your EFIS-D10 prior to upgrading it to the EFIS-D10A, please refer to the EFIS-D10A Installation Guide for the full installation process.

TOOLS AND EQUIPMENT

Required but not supplied

- Existing EFIS-D10 wiring harness built as described in your original EFIS-D10 Installation Guide.
- Wire cutters
- Wire (22 AWG); see recommended wiring practices in EFIS-D10A Installation Guide.
- Connector crimp tool
- (2) ½" wrenches

WIRING

The following describes the various harnesses that feed into and out of the EFIS-D10A. Some of them have not changed between the EFIS-D10 and the EFIS-D10A.

Power Harness

No changes have been made to the power input pins. No modifications are necessary to your existing harness.

PC Communication Harness

No changes have been made to the PC communications pins. No modifications are necessary to your existing harness.

EDC-D10A Harness

If you currently have an EDC-D10 remote compass module, and are upgrading to the EFIS-D10A, you will also need to upgrade to the EDC-D10A and rewire its harness.

Two connections on the harness to the EDC-D10A have changed. If you had the EDC-D10 and have received an EDC-D10A as part of your upgrade, you will need to make two changes to your harness. To make these changes, you will need to clip two wires from the D9 which mates with the EDC-D10A, crimp new pins on them and insert them into different sockets on the connector. The following chart describes the differences.

Pin #on EFIS-D10A D25	Old pin # on EDC-D10 female D9	New pin # on EDC-D10A female D9	Pin function
11	3	5	Data B
23	4	9	Data A

Encoder Harness

The EFIS-D10A no longer utilizes the parallel wiring interface for its encoder output. Encoder information is now output to a transponder via a 2 wire serial link.

The EFIS-D10A outputs its altitude measurements in a standard serial output and is readable by transponders equipped for serial input. The EFIS-D10A will function properly whether or not this altitude encoder functionality is utilized. To use the EFIS-D10A's serial altitude encoder, simply wire the 2 encoder connections (GND and Serial 2 Tx) from the D25 connector to their respective connections on your transponder.

If you are already utilizing the parallel Mode C gray code output of the EFIS-D10, you will need to make the following changes to your wiring.

Pin # on EFIS-D10 D25	Action for use of EFIS-D10A's serial encoder
4,5,6,7,8,16,17,18,19,20	Remove
13	Wire to transponder serial input
21	Move to transponder ground pin

The serial encoder output of the EFIS-D10A reports pressure altitude, that is, altitude unadjusted for barometric pressure.

WEIGHT

Note that the EFIS-D10A has a slightly different weight from its predecessor. You may need to plan weight and balance accordingly.

- EFIS-D10A: 1 lb 9 oz.
- EFIS-D10A + battery: 1 lb 15 oz.
- EDC-D10A: 3.6 oz.

PLUMBING

The AOA, Pitot, and Static connections on the back of the EFIS-D10A have not changed from the EFIS-D10. Simply screw in the plumbing fittings in the same arrangement as before.