

# Does Primus 1000 got you *down*?

by Matt Richardson 9.28.2014



If you are a Citation operator and fly with Honeywell's Primus 1000 cockpit, then you've probably felt as though you've been let down (literally or figuratively). Primus 1000 used to be a great cockpit, but the 1980's is over and Cathode Ray Tubes don't belong in an aircraft. These days the first-generation 'glass' cockpits [like Primus 1000] have become a liability for aircraft. CRT's are prone to failure and they are no longer manufactured or repaired. Cockpits like Primus 1000 are very expensive (if not impossible) to maintain and upgrade. The high service costs and poor reliability associated with Primus 1000 is well known in the industry and your aircraft has lost significant value.



## DU-870:

Lists (Each): \$216,946  
Exchanges: \$32,451  
Monthly Rental: \$15,520



Src: 2012 Spex Catalog

The **good news** is that Canaan Avionics has developed proprietary technology which unlocks Primus 1000, enabling NextGen avionics to be installed without a complete retrofit.

Our design objectives were clear...

> **Cost** We've borrowed cost-effective tech from Garmin and paired it with tech from Universal Avionics that carries certified reliability for Part 25 aircraft. Our integration strategy and package saves millions of dollars in development and certification costs.

> **Compatibility** Our system reuses proven retrofit technologies instead of reinventing them. We were able to remove all of the CRT's in the Citation, while interfacing with existing systems.

> **Power** There is absolutely no reason for Citation Encore to be stuck with a less capable cockpit than a Citation Mustang. Our solution brings your Citation up to speed:

- 4 Advanced LCD flight displays
- Graphical Weather and Electronic Charts
- New Digital Radios
- New Digital Audio Integration
- WAAS LPV approach capability
- Class B TAWS
- **ADS In and Out Compliance**
- Graphical Flight Planning and Airport Maps
- Digital Audio Integration
- The Industry's latest Graphical Weather Radar
- Optional Synthetic Vision and Digital AHRS

Canaan Avionics has started an STC project which covers all Citation models equipped with Primus 1000, including Ultras, Encores and Excels and Bravos.

> **Universal EFI-890R PFD's** These displays are proven to be the most cost-effective, versatile and upgradable cockpit suite on the market. We knew we had to find a way to bring EFI-890R into the Citation.



Choose from a selection of TAWS, Traffic, Weather Radar, FMS Maps, and NAV Radios on a composite display. The high-resolution screens provide smooth and reliable air data, attitude and flight

guidance of which the existing Primus CRT displays cannot compare. As an option, you can even display Synthetic Vision (pictured).

> **Garmin GTN-750 MFD's** There is no better MFD on the market and your Citation will get two of them. Packed inside these units are a high resolution touchscreen, WAAS LPV GPS Receiver, a NAV Receiver, 16 Watt High Power COM Radio and a TAWS Computer. Besides displaying rich moving maps, the MFD's can overlay TCAS/ADS-B traffic targets, electronic charts, graphical weather, and they display and control the new weather radar. The GTN-750 MFD is Garmin's masterpiece.

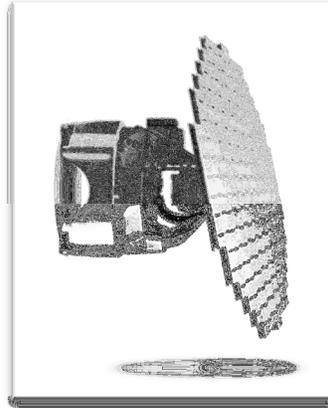


### > **ADS-B In/Out Equipment**

This integrated traffic solution propels your Citation into the 21<sup>st</sup> Century with complete Traffic and ADS-B In and Out Compliance. Depending on the existing transponder configuration, a TDR-94D or a Garmin GTX-3000A will be integrated with a piggy-backed GDL-88 for both 1090MHz and UAT channeling. This solution will provide more capability to your aircraft at a fraction of the cost of upgrading your existing Honeywell XS-852 transponders.

### > **Garmin GWX-70 Doppler Weather Radar**

This Garmin Weather Radar is a significant upgrade to the existing Primus Radar, which is notoriously unreliable and unclear.



The GWX-70 provides full-color storm cell tracking and is displayed on the EFIS displays. The Doppler-capable weather avoidance tool combines excellent range and adjustable scanning profiles with precision target definition. With pilot-adjustable horizontal

scan angles of up to 120°, you can easily focus scanning on the areas you want to watch.

### > **Digital AHRS**

As a recommended option, the STC also includes a new digital AHRS system to replace the existing iron gyros.

## *So how much is this going to cost me?*

Canaan Avionics is marketing this solution by opening the books for our clients. We have no objections when it comes to providing our prices upfront because no one else can do it for less money or less time. We've already invested heavily in the development of proprietary technology which makes this modification possible. We kicked off an aggressive certification schedule and a lean budget. For more details, contact us at Canaan Avionics on the web via [www.canaanavionics.com](http://www.canaanavionics.com).

Respectfully,



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