EASA APPROVAL OF THE GARMIN G3X TOUCH FLIGHT DISPLAY IN SINGLE-ENGINE PISTON AIRCRAFT

News / Business aviation, Manufacturer

Garmin has received EASA certification of the G3X Touch flight display for hundreds of single-engine certificated aircraft. The G3X Touch offers a variety of scalable panel configurations and a superior feature set that includes wireless connectivity and synthetic vision as standard, as well as advanced features such as display redundancy, advanced autopilot compatibility, engine monitoring and more.

“Through a well-established relationship with EASA and a combined commitment to improve safety in general aviation, we are thrilled to bring the G3X Touch glass display suite to hundreds of certified piston aircraft in Europe,” said Carl Wolf, vice president of aviation sales and marketing. “As a trusted leader in avionics, we’re excited to offer this game-changing system to aircraft owners who are ambitious to pursue a flight display upgrade, giving them an opportunity to take advantage of the safety and redundancy benefits of a Garmin glass display system.”

The G3X Touch system for certified aircraft is representative of Garmin’s experience in integrated flight deck technology, which boasts a resilient, high-resolution display with a clean and sleek appearance. The touchscreen offers an intuitive user interface and through any combination of the touchscreen or dual-concentric knobs, pilots can efficiently perform common in-flight functions like direct-to navigation, setting altitude pre-select or radio

tuning. Pilots will also appreciate the seamless in-flight experience behind G3X Touch as the user interface is harmonious with multiple Garmin products, such as the GTN™ 650Xi/750Xi navigators or the GPS 175, GNC®355 and GNX™ 375.

Multiple panel configurations and display options allow pilots and aircraft owners to take a scalable approach to their current and future avionics investment. One configuration option includes dual large 10.6-inch G3X Touch displays and another includes a 10.6-inch display paired with a 7-inch display. Both of these configurations offer the convenience and utility of a large primary flight display (PFD) with a dedicated multi-function display (MFD). Another option allows dual 7?inch displays to serve as a dedicated PFD/MFD. For space-limited panels, pilots can also install a single 10.6-inch or 7-inch display. In configurations where multiple displays are installed, the G3X Touch system offers redundancy through a reversionary mode where a single display is capable of showing all primary flight information, including engine information when installed. For aircraft owners that have already installed a G5 electronic flight instrument in their aircraft, they can easily add a G3X Touch display to take advantage of the redundancy benefits associated with this configuration. The building-block design of these five approved cockpit configurations give aircraft owners scalable upgrade options that suit a variety of panels.

The G3X Touch suite offers an impressive array of standard features that give pilots greater situational awareness throughout every phase of flight. Synthetic Vision (SVX™) comes standard on all G3X Touch displays and provides a rich, three-dimensional depiction of terrain, obstacles, water features, the runway environment and more. Capable of serving as a standalone VFR navigator, the G3X Touch provides benefits that help further situational awareness in visual conditions with features like vertical navigation (VNAV), which allows pilots to generate a vertical descent profile by setting an altitude constraint in the flight plan. Modern tools such as wireless flight plan transfer, the sharing of traffic1, weather1, back-up attitude information and more with a compatible tablet or smartphone are all available via Garmin Connext®.

The G3X Touch flight display for certificated aircraft can interface with a variety of optional Garmin equipment including:

- For complete IFR-approach compatibility, customers can pair the G3X Touch with a variety of **Garmin GPS navigators and Nav/Comms**, including the GTN 650Xi/750Xi, GTN 650/750, GPS 175/GNX 375, GNS™ 430W/530W, GNS 480, SL 30/40, and GNC 255.
- For aircraft that can benefit from a modern autopilot, the **GFC 500 autopilot** provides workload-reducing features such as auto-trim, flight director, airspeed climbs and descents, dedicated level (LVL) mode and more. Garmin Electronic Stability and Protection (ESP), underspeed and overspeed protection are also available as standard and work in the background to help pilots avoid inadvertent flight attitudes or bank angles while the pilot is hand-flying the aircraft. The addition of yaw damping (YD) minimizes yawing oscillations and helps maintain coordinated flight by keeping the slip/skid indicator centered. Additionally, G3X Touch can now serve as an attitude source for the GFC 500 autopilot, which does not require the G5 electronic flight instrument when installed with G3X Touch.
- Pilots can fly **fully-coupled instrument and visual approaches** when the G3X Touch is paired with the GFC 500 autopilot and a GPS 175/GNC 355/GNX 375, GTN 650Xi/750Xi or GTN 650/750. Pilots can also fly fully-coupled go-arounds during missed approach sequencing after an instrument approach.
- The **G5 electronic flight instrument** can be utilized as an all-in-one back-up instrument2 to the G3X Touch flight display, offering superior redundancy and the sharing of attitude information, air data, baro sync, and miscompare alerts. In the event of a miscompare between the G3X Touch and G5 attitude or air data sources, the GFC 500 autopilot will

choose the best available source and continue to function normally.

- Pilots can receive and display the benefits **ADS-B In** via the GNX 375, GTX™ 345 or the GDL® 50R/52R. ADS-B-enabled features such as patented **TargetTrend™** and **TerminalTraffic™** are also available with these products.
- The **GMA™ 345/342 audio panel** adds advanced functions, including auto squelch, 3D Audio and Bluetooth® connectivity.
- Up to two Comm radios can be supported and controlled by G3X Touch, including the **GNC 255 Nav/Comm** and the **GTR 225 Comm**, as well as the GTN 650Xi/750Xi or GTN 650/750.
- G3X Touch can display primary **engine information** with the addition of the GEA 24, including engine gauges, color bands, alerts, fuel and other vital information. Piston engines with up to 6 cylinders are supported.
- The **GTS 800** active traffic system can interface with G3X Touch, offering added protection and visibility while operating in high-density airspace and traffic environments.

25 JULY 2020

ARTICLE LINK:
https://to.50skyshades.com/news/manufacturer/easa-approval-of-the-garmin-g3x-touch-flight-display-in-single-engine-piston-aircraft