

To: Garmin Aviation Dealers  
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## Introducing Another Aviation First: The GTN 650 and GTN 750 Series

Garmin is changing the course of aviation yet again! Introducing the GTN 650 and 750 series "next generation" touchscreen avionics. These panel-mount units are certified and approved for installation in hundreds of makes and models of general aviation aircraft. The GTN 650 and GTN 750 vary in capability. Both have GPS/NAV/COM capabilities and new features like intuitive touchscreen operation, graphical flight planning, victor airway and high-altitude jet route navigation, remote transponder, SafeTaxi® and more. The GTN 750 series additionally also allows for remote audio control and electronic chart capabilities.

### Intuitive and Simple User Interface

The GTN 650 series and 750 series both feature a shallow menu structure, simple menu interface with intuitive icons, audio and visual feedback, and animation so that pilots know exactly how the systems are responding to their input. The GTN has a touchscreen alphanumeric keyboard, and also utilizes a "back" icon which allows for quick and easy operation.



Recognizing that hand stabilization will help make it even easier to enter data in smooth or turbulent flight conditions, both units have a finger anchoring bezel around the side of the display and fingerboard at the bottom of the screen. For those who prefer traditional data entry via buttons and knobs, the GTN systems have a dual concentric knob for data entry, volume/squelch knob, "home" button and "direct to" button so that pilots can perform basic operations – like direct-to operations or change COM frequencies – without using the touchscreen. With the home key, pilots are seldom more than two taps away from all primary pages and functions.

### Easy Flight Planning

The GTN series offers graphical flight planning capability (patent pending) so that pilots can edit an active flight plan route on the map and easily enter a new waypoint or modify the sequence by tapping or dragging their finger on the screen. A unique "rubber band" feature lets pilots select a flight plan leg on the screen and then alter it to accommodate a deviation or ATC amendment. In addition, pilots can pan across the map display by swiping their finger across the screen. Victor airways and high-altitude jet routes can be overlaid on the moving map, and airway segments can be selected onscreen for instant entry into a flight plan.

## Over 50 percent more screen on the GTN 650 series and nearly 100 percent more on the GTN 750 series

The most notable physical difference between the GTN 650 and 750 series is the screen size. The GTN 650 series has the same exterior footprint as the GNS 430W, but has a 4.9-inch screen (diagonal) that has 53 percent more screen area than the GNS 430W. The GTN 750 series' large 6.9-inch screen (diagonal) has 98 percent more screen area than the GNS 530W, which makes it possible to view an entire chart via Garmin FliteCharts or optional ChartView™ (powered by a JeppView® subscription), as well as display integrated audio and intercom functions (with the new optional GMA™ 35 remote mount audio system). In addition, both units display a greatly enhanced, higher resolution picture (GTN 650 series: 600x266 pixels; GTN 750 series: 600x708 pixels) that has over 5 times more pixels than the GNS 430W and 530W, respectively.



## Enhanced situational awareness

Thanks to built-in terrain, mapping and obstacle databases, the GTN provides a greatly enhanced, high resolution presentation of the surrounding area. A built-in terrain elevation database shows color-coded alerts when potential terrain conflicts are ahead. Full Class B TAWS alerting is also available as an option. The SBAS/WAAS equipped GTN 650 and 750 series let pilots fly GPS-guided LPV glidepath approaches down to ILS-comparable minimums. In addition, precise course deviation and roll steering outputs can be coupled to select autopilots so that IFR flight procedures may be flown automatically. This includes all ARINC 424 leg types, excluding RF legs (for example, when coupled with a G500/G600 Flight Display, the aircraft can fly fully coupled missed approaches, including heading legs).

## Add weather, traffic and more

Because the GTN offers wide compatibility with select Garmin avionics and sensors, Garmin has made it possible to have a consistent and intuitive interface with other systems – like audio and transponder – by providing simplified systems management functionality on the GTN equipped flightdeck. Saving valuable panel space, Garmin's new **GMA 35** remote mount audio processor (optional) interfaces with the GTN 750 series and makes it possible for the GTN to be used as a touchscreen control head for the aircraft's audio and intercom functions. This function graphically shows audio distribution, allowing the pilot to visualize the possible connections and distribute audio to the passengers by touching the link (see page 5 images). The GMA 35 helps streamline cockpit communications with record/playback function. It also includes an internal microphone that senses the amount of ambient noise, and can automatically adjust the cockpit speaker and the headset volume based on the level of noise in the cockpit. Garmin's GTX 32/33/33D remote transponders (optional) also interface with the GTN 650 or 750 series so that pilots can control transponder function from the GTN's display. Optional "ES" (Extended Squitter) versions of the GTX 33/33D mode S transponders are available which will support ADS-B/Out.

Multi-function display capabilities continue with interface to optional equipment like the GDL 69/69A satellite weather datalink receiver, WX-500 lightning detection system and select traffic system inputs and may be overlaid on the moving map. XM WX Satellite Weather™ and radio service is only available to U.S. and Canadian customers with a subscription and GDL 69 series datalink receiver.

The GTN 650 and GTN 750 systems feature a 10-watt COM, and are field upgradeable to a 16-watt COM. In the third quarter of 2011, Garmin will make available a GTN 625 and GTN 725, a GPS only version of the GTN 650/750 respectively. A GTN 635 (GPS/COM version of the GTN 650) will also become available in the third quarter of 2011. All models contain SBAS/WAAS GPS receivers.