

# **GTN** series

Garmin touchscreen avionics are redefining what it means to fly with your fingertips.



What began back in 1998 with the debut of Garmin's best-selling GNS 430/530 series of GPS/Nav/Comm products is now evolved to a whole new level in the GTN series of next-generation avionics.

Combining the latest in multi-function display (MFD) features with touchscreen data entry and integrated radio tuning – as well as optional remote transponder and audio panel control – the GTN series offers amazing, yet simple-to-use, technology that once again promises to redirect the course of General Aviation electronics.

# [ Introducing the next generation of Garmin integrated avionics solutions.]



A new graphical user interface with icon-identified onscreen touchkeys makes functions easy to locate and access on the units' large, high-resolution TFT displays. Page navigation is more intuitive than ever, with a "shallower" menu structure that greatly simplifies operational sequences. In fact, you're rarely more than two taps away from all primary pages and functions. You can quickly pan across the map display by simply swiping your finger across the screen. And integration capability for a wide array of avionics and sensors not only simplifies tuning and mode selection – but, in effect, lets pilots utilize the GTN touchscreen as a virtual flight management system.



### There's no place like "Home".

Familiar icon-style graphical interface on the GTN "Home" page makes all operational functions easy to access. A quick tap of the dedicated HOME key on the bezel takes you back to the desktop from any page in any data sequence.



#### Land with a plan.

Garmin SafeTaxi<sup>®</sup> airport diagrams come pre-installed on all the new GTN models. Plus, on the GTN 750 series, you also get preloaded electronic FliteCharts<sup>®</sup> that incorporate over 11,000 approaches for some 2,900 U.S. airports.



#### Terrain made plain.

With its built-in elevation database, your Garmin GTN system provides an extra margin of safety in visualizing terrain/obstacle conflict situations. For added protection against hazardous topography, audible terrain alerts and visual pop-ups are supported with optional TAWS-B functionality.



### Optional satellite weather.

With available XM<sup>™</sup> WX Satellite Weather link, your GTN unit can access graphical NEXRAD imaging, as well as the latest METARs, TAFs, lightning, and other up-to-the-minute meteorological data. (Requires GDL 69 receiver and XM subscription, sold separately<sup>1</sup>.)



Integrate your approach plate. With optional Garmin Char View installed on your GTN 750 series unit', a graphical view of your Jeppesen-format approach plate can be overlaid on the moving map for geo-referenced guidance through the procedure.



#### Easy audio integration.

The large-format GTN 750 series can be used as a touchscreen control head to integrate the audio and intercom functions for your aircraft. Garmin's remote GMA 35 audio system (sold separately) helps streamline cockpit communications with record/ playback capability for copying clearances.



Graphical flight planning. Onscreen flight plan editing makes it easy to add waypoints or modify your route. And with handy "rubber band" feature, you can even stretch a flight plan leg to detour or amend your routing



Raised grips on each side of the bezel, plus a shelf across the lower edge of the display, serve as anchor points to keep your hand securely in position while entering onscreen data in turbulent air.

## Five flavors to choose from.

The new GTN multi-capability units are offered in two sizes and a variety of configurations. All GTN 650 series products are contained in a 2.64-inch tall package that replicates the in-stack form factor of our popular GNS 430W design. (Note: the glass area on the GTN 650 series is over 50 percent larger than its GNS 430W series predecessor — while the GTN 750 series screen is nearly 100 percent larger than that of the GNS 530W.) The larger GTN 750 series bezel stands 6 inches tall (compared to 4.6 inches for the similar GNS 530); however, to save space in your avionics stack, both the GTN 650 and 750 systems can provide onscreen code selection and ident for optional remote-mount Garmin transponders (sold separately). In addition, the larger-format GTN 750 screen can optionally be used as your control panel for a new Garmin remote-mount audio processing unit. The ability to remotely tune both audio/intercom system and transponder functions from the 750 series means you can position those products behind your panel — and thus accommodate the larger screen in less total stack height.

The optional GMA 35 remote audio control unit (sold separately) works with the GTN 750 series to streamline cockpit communications. Its work-saving features include a new high-precision automatic squelch function, as well as record/ playback capability for help in copying clearances and verifying ATC instructions. Future software upgrades will enable the GMA 35 to incorporate even higher levels of automation, including digital voice activation and other auto-adjustment features (requires pre-wired push-to-command button, sold separately).

Simplicity is paramount in every aspect of the GTN cockpit interface. There are only four mechanical controls on the bezel of each panel-mount unit: 1) A volume/squelch knob located in the upper lefthand corner; 2) a HOME key on

#### Do more with a shorter stack.

In addition to full GPS/Nav/Comm radio management and graphical MFD-like map navigation, you can optionally use any GTN touchscreen as a control head for compatible remote-mount ATC transponders. The larger-format GTN 700 series can also be used to control a remote audio/intercom system.



the upper righthand side that returns the display to the icon-style main menu interface; 3) a Direct-To key on the right-side bezel that allows a direct GPS course to be entered for any selected waypoint; and 4) a set of multi-purpose concentric tuning knobs, in the lower right corner, that diehard knob-twiddlers can use in lieu of the units' touchscreen keypads to enter frequencies, codes or numerical data. All other GTN system capabilities are accessed directly from the graphical touchscreen display.

The GTN product line begins with two standalone GPS-only options: The GTN 625 and 725. These units both feature a robust 15-channel WAAS-certified

Product comparison:	GTN 625	GTN 635	GTN 650	GTN 725	GTN 750
Operational interface	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen
Unit size (height)	2.64″	2.64″	2.64″	$\sim$	6″
Display resolution (pixels)	600 x 266	600 x 266	600 x 266	600 x 708	600 x 708
10-watt Comm radio	No	Yes	Yes	No	Yes
16-watt Comm radio	No	Optional	Optional	No	Optional
VOR/ILS/GS Nav radio	No	No	Yes	No	Yes
Gamma 3 WAAS GPS	Yes	Yes	Yes	Yes	Yes
Hi-res Terrain graphics	Yes	Yes	Yes	Yes	Yes
Internal TAWS-B terrain alerting	Optional	Optional	Optional	Optional	Optional
Preloaded initial U.S. FliteCharts®	Not Available	Not Available	Not Available	Yes	Yes
Jeppesen ChartView <sup>™</sup>	No	No	No	Optional	Optional
Preloaded U.S. SafeTaxi®	Yes	Yes	Yes	Yes	Yes
XM WX Satellite Weather capable <sup>1</sup>	Yes	Yes	Yes	Yes	Yes
Can control remote transponder <sup>2</sup>	Yes	Yes	Yes	Yes	Yes
Can control remote audio processor <sup>3</sup>	No	No	No	Yes	Yes
Traffic System capable <sup>4</sup>	Yes	Yes	Yes	Yes	Yes

<sup>1</sup>Requires GDL 69 antenna (sold separately); XM subscription required <sup>2</sup> GTX 32/33 series remote transponders sold separately <sup>3</sup> GMA 35 remote audio panel sold separately <sup>4</sup> Requires GTS 800/820/850 or compatible 3rd party traffic alerting systems

GPS receiver generating five position updates per second. The GPS is TSO C146c certified for primary navigation in all phases of flight – enroute, terminal and approach – with the WAAS technology enabling pilots to fly GPS-guided LPV glidepath instrument approaches down to ILS-comparable minimums (200-ft. decision height, 1/2-mile visibility) where suitable airport conditions exist. Using Wide Area Augmentation System (WAAS) vertical approach guidance, IFR pilots are provided with more all-weather landing options than ever before.

Then, looking beyond standalone GPS capability, Garmin's new GTN 635 GPS/Comm includes all the navigation features of the GTN 625/725, plus a 2280-channel capable VHF communications transceiver (with standard 10-watt or optional 16-watt power output). System settings allow users to select between 8.33 and 25 kHz channel spacing. And the familiar "flip-flop" frequency selection scheme allows comm channels to be entered in a standby window, and then activated with a touch of the display. In addition, a handy comm monitor function effectively lets you monitor two separate frequencies from the same radio at once (with the active comm channel always taking priority on incoming calls.)

Finally, for the pilot who wants a comprehensive "all-in-one" solution, Garmin offers two choices: The GTN 650 and 750 models. These top-of-the-line units include all the GPS/Comm features of the 635, plus a complete package of VHF omni navigation capabilities, including 200-channel VOR/ILS with Localizer and Glideslope receivers. As a useful backup to one's primary flight instruments, all GTN units feature an electronic CDI display with digital track-error indication. And the detailed moving map presentation makes for easy viewing of the aircraft's current position in relation to ground features, navaids, flight plan routings, approach procedures and more.

# Flight planning made simple.

Every model in the new GTN product family offers graphical flight planning capability: A unique keystroke-saving feature that allows the pilot to preview a flight plan routing on the map and easily enter new waypoints or modify the sequence with a few taps of the screen. In addition, airway segments can be similarly loaded, selected and displayed for enroute routings. A handy "rubber band" feature lets you grab any flight plan leg on the screen, and then stretch or move it to accommodate a deviation or ATC amendment to your flight plan.

By referencing built-in terrain, mapping and obstacles databases, the new GTN units provide a clear MFD-like presentation of the visual landscape beneath your aircraft – including topography features, cities, airports, terminal areas, SUAs, and more. For added safety, there's a built-in elevation database that provides color-coded terrain page reference and moving map overlays to indicate those areas where potential ground proximity hazards may exist. Full Class B TAWS alerting is available as an option for voice and visual pop-up alerts. And precise course deviation and roll steering outputs can be coupled to many compatible GA autopilots, enabling virtually all IFR flight procedures to be flown automatically. Then, once you've landed, geo-referenced SafeTaxi<sup>®</sup> diagrams automatically provide easy directional orientation on nearly 1,000 U.S. airports.

# Ready, set, grow.

Each model in the GTN lineup can support a wide array of optional weather, lightning and traffic system inputs for overlay on the moving map. Optional XM WX<sup>™</sup> Satellite Weather, with graphical NEXRAD, METARs, and more, can be accessed through Garmin's GDL 69 data link receiver (sold separately)<sup>1</sup>. And you'll find room on the GTN 750 series' 6.9-inch diagonal



touchscreens to allow display of your airway charts and approach plates — which come pre-installed on these units in the form of standard Garmin FliteCharts<sup>®</sup>. Or, if you prefer the Jeppesen format, you can elect to go with optional ChartView<sup>™</sup> electronic charts instead<sup>2</sup>. With ChartView<sup>™</sup> installed, a helpful Garmin geo-referencing feature enables a graphical view of your approach plate to be overlaid on the GTN 750 series moving map for realtime visual guidance cues in flying the procedure.

Making flight easier by making avionics smarter: That's what the GTN touchscreen series is all about. To find out more, see your Garmin dealer. Or visit our website at www.garmin.com/gtn.

Electronic Garmin FliteCharts® come pre-loaded on the largerformat GTN 750 series units.

# GARMIN GTN SERIES FEATURES AT A GLANCE

- Menu-driven graphical interface on color LCD touchscreen display
- Feature-rich MFD capabilities: moving map, chart display, airways, approaches and more
- GPS TSO'd to C146c, authorized for Class 1,2,3 (LPV)
- GPS WAAS-certified to Gamma-3 approach capability
- WAAS-corrected GPS signal accuracy to 1 meter RMS
- Built-in GPS/ILS/VOR/LOC and Glideslope capabilities available
- Graphical flight planning (including airway navigation)
- VHF comm transceiver: 8.33 or 25 kHz channel spacing
- Comm transmit power: 10 watt standard, 16 watt optional
- Extensive optional interface capabilities: lightning, weather, traffic, TAWS-B terrain alerting, and more
- Integrated control/display for remote transponder
- Integrated control for remote audio panel functions (GTN 700 series only)
- Flight control system interface for select autopilots
- Optional XM WX satellite weather and XM Radio
- SafeTaxi<sup>®</sup> airport diagrams
- Award-winning Garmin product support and 2-year warranty

XM subscription required (sold separately) Requires Jeppesen JeppView<sup>®</sup> subscription (sold separately).

# www.garmin.com

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