PORTABLE FLIGHT SOLUTIONS

PURPOSE-BUILT HANDHELDS AND APPS FOR PILOTING YOUR OWN COURSE



PORTABLES

THE FAST-EVOLVING WORLD OF PORTABLE GPS

It wasn't so very long ago that the words "aviation portable" could be used to categorize, fairly concisely, a segment of stand-alone GPS handheld products. But nowadays with the emergence of sophisticated navigation, mapping and digital flight bag apps for iPads®, smartphones and other tablet-type computer devices, the very idea of what constitutes a "portable product" for aviation has taken on a whole new range of meanings.

What's more, the industry's accelerating move toward the NextGen airspace system has brought with it an array of new cockpit connectivity options, including subscription-free U.S. weather, NEXRAD imagery and ADS-B traffic monitoring services, which now can all be accessed easily via portable, pocket-sized datalink receivers that pilots can carry with them into any aircraft they fly. Moreover, a number of these products now include their own wireless local link capabilities (via our Garmin Connext® technology), which enable them to remotely connect, control, activate and/or "talk with each other" in ways that promise even greater things to come.

In other words, it's a new world out there.

But rest assured, it's a world where Garmin innovation continues to set the pace, with the performance, value and first-in-class features that make GPS-based navigation truly portable and affordable for everyone who flies.

Designed for pilots by pilots, our portable solutions are known for their reliability, durability, practicality, safety-enhancing features and simplicity of operation – no matter what hardware and/or software configuration they might take. They've all been tested and optimized for use in demanding cockpit environments. And they're backed by the most highly acclaimed service and support network in the aviation industry. No wonder pilots around the globe look to Garmin as their go-to source for today's best in portable flight technology.

GARMIN.

CONTENT

Aviation GPS Portables	05
aera® 660/760	06
Garmin Pilot™	08
inReach® Mini 2	10
D2™ Mach 1 Pro	15
D2™ Mach 1	17
D2™ Air X10	18
GLO™ 2	20
GDL® 52 Series	22
Connext®	25
Support	27



DEDICATED GARMIN GPS PORTABLES BRING CARRY-ON CONVENIENCE TO FLIGHT NAVIGATION

Featuring cockpit-proven technology that's optimized for pilot use in ways that most generic GPS devices or apps clearly are not, the Garmin aviation portable lineup puts the absolute best in satellite-based flight guidance right at your fingertips. No matter which model you select, you can count on Garmin aera® series portables to provide the features, reliability, processing power and onboard resources to help you make better piloting decisions. Each navigator comes with detailed aerial mapping, a built-in terrain/obstacles database and WAAS GPS position accuracy. And you can display SiriusXM® satellite weather and entertainment[1], as well as subscription-free ADS-B weather and traffic, with an optional receiver (sold separately).

[1]Active subscriptions are required for optional SiriusXM weather and audio entertainment packages (sold separately). XM coverage area is limited to continental U.S. and its coastal regions, as well as southern Canada (active subscriptions required).

PURPOSE-BUILT FOR AVIATION, DESIGNED FOR TRUE PORTABILITY

Our sleek aera® 760, with its 7" display, and aera® 660, with its 5" display, are the most powerful, most robust, most capable aviation handhelds we've ever designed in formats this compact. And they provide the features, reliability, processing power and onboard resources to help you make better piloting decisions. Each navigator comes with detailed aerial mapping, a built-in terrain/obstacles database and WAAS GPS position accuracy. And you can display SiriusXM® satellite weather and entertainment[1], as well as subscription-free ADS-B weather and traffic, with an optional receiver (sold separately).

Both can quickly and reliably acquire GPS and GLONASS satellite constellations, combining advanced navigation tools with detail-rich flight mapping. You can even access weather via Wi-Fi® anywhere you have an internet connection to give you more planning options before heading to the airport.

They also deliver an intuitive touchscreen interface that allows you to quickly pan across the map screen – or pinch-to-zoom for the exact map scaling you want to see. Our signature Direct-to feature is always available, so it's easy to command navigation functions or find the nearest airports from any page on the display. You can even use optional maps to locate street intersections and other non-aviation waypoints. Additionally, the aera 760 allows you to enter airway segments into flight plans, as well as visualize and plan departures, arrivals and approaches — and even see approach plates overlaid on the map.

With either navigator, a quick touch of the power button on top of the bezel gives you the option of switching between portrait and landscape view at any time. This button can also be used to control the audio volume, mute aural alerts, adjust display brightness and access other basic settings.

For added perspective, Garmin 3D Vision technology leverages a worldwide terrain database to give you a virtual 3-D, behind-the-aircraft view of the surrounding landscape, while overlaying GPS-derived airspeed, altitude and vertical speed alongside flight plan information. When you connect the devices to an attitude source, such as a GDL® 52 series or compatible Garmin avionics, Garmin SVX™ synthetic vision and attitude command bars can be automatically added to your display as well. And when integrated with your compatible panel-mounted avionics, they can also provide coupled lateral and VFR vertical guidance to your GFC™ 500 or GFC™ 500X autopilot, allow you to upload radio frequencies into the standby position of select Garmin Comm radios and provide GPS position that enables Garmin GTR 225 Comm and GNC® 255 Nav/Comm to look up nearest frequencies.

Comprehensive chart options provide an easy pathway to paperless cockpit operations – and the aera 660 and aera 760 can be qualified for use as an electronic flight bag. View georeferenced VFR sectional and IFR en route charts for the U.S., Canada and Europe. SafeTaxi® charts for the U.S., Canada and Europe are also available, as are an AOPA Airport Directory and a worldwide AC-U-KWIK directory. Local fuel prices for U.S. airports can be easily accessed on the map — with the best nearby prices highlighted — or within the directory database so you'll know where to plan your fuel stops.

Other aera 660 and aera 760 technology highlights include vertical navigation guidance, Smart Airspace™ display, WireAware™ wire-strike avoidance technology, Wi-Fi® database downloading, TargetTrend™ and TerminalTraffic™. And both devices are compatible with the cost-effective Garmin navigation database. For the money — and for the performance — the aera series is truly in a class by itself.

[1]Active subscriptions are required for optional SiriusXM weather and audio entertainment packages (sold separately). XM coverage area is limited to continental U.S. and its coastal regions, as well as southern Canada (subscriptions required).



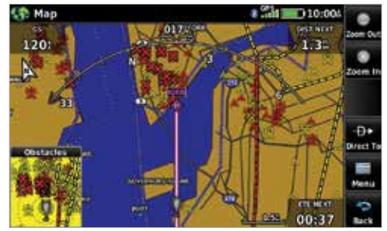
Preloaded SafeTaxi® diagrams with georeferencing capability aid navigation on unfamiliar airports. With a compatible ADS-B "In" receiver (sold separately), Garmin TerminalTraffic™ technology can also display nearby ADS-B equipped surface targets.



Database-driven 3D Vision display offers a simulated terrain view in context with your aircraft. You can rotate the 3-D view completely around the aircraft for easy scanning from various "camera ship" perspectives.



With ADS-B "In" data from compatible devices (sold separately), the aera 660 and aera 760 can display subscription-free U.S. weather and traffic, overlaid on the moving map.



For low-flying helicopters and patrol aircraft, Garmin WireAware™ wire-strike avoidance technology offers added protection against powerline incidents.



An available AOPA Airport Directory provides data on thousands of U.S. airports. (A worldwide AC-U-KWIK directory is available optionally.)



With ADS-B "In" from a compatible receiver (sold separately), the aera 660 and aera 760 can display traffic enhanced with Garmin TargetTrend™ technology, which shows target trajectories relative to your aircraft.



IFR Enroute and VFR Sectional charts for the U.S. feature georeferencing capability — with an overlaid aircraft symbol indicating your current position.



SiriusXM® weather[1] can overlay the moving map, while SiriusXM satellite radio support lets you enjoy 150+ audio channels[1].

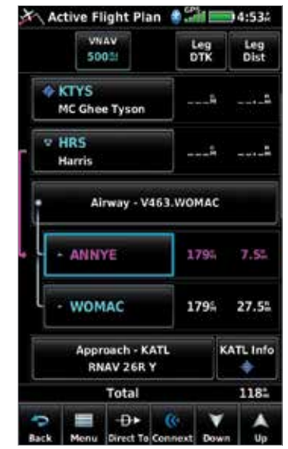
SPECIFICATIONS

Receiver	High-sensitivity, WAAS-enabled GPS plus GLONASS
Waypoints	3,000
Routes	50 with up to 300 points each
Basemap	North America, South America, Atlantic or Pacific
Uploadable maps	Supports optional detailed maps
Battery life	Up to 4 hours (nominal) based on backlight and connectivity
Size	5.5"W x 3.4"H x 0.8"D (aera 660) / 7.29"W x 4.85"H x 0.91"D (aera 760)
Display size	5.08" diagonal (12.9 cm) / 7" Diagonal (17.8 cm)
Weight	8.64 oz (aera 660) / 19.8 oz (aera 760) with battery

[1]Subscriptions are required for optional SiriusXM weather and audio entertainment packages (sold separately). XM coverage area is limited to continental U.S. and its coastal regions, as well as southern Canada (subscriptions required).









CLEAR YOUR TABLET FOR TAKEOFF WITH OUR GARMIN PILOT™ APP

With an expanded suite of tools for preflight planning and in-flight operations on both VFR and IFR flights, Garmin Pilot lets you turn a whole array of Apple®- and Android™-based mobile devices (including Apple's iPad®, iPhone® as well as other popular smartphones and tablets) into some of the most versatile piloting tools you've ever slipped into a flight bag.

Garmin continues to pack more features and capabilities into Garmin Pilot to make it aviation's premier, all-in-one application — merging flight-plan data with other information such as integrated weight-and-balance calculations, aircraft performance tables and more. Freehand flight planning allows for quick and easy editing of flight plans directly from the moving map page. And pilot-configurable checklists let you create custom checklists that are quickly accessible from within the app.

Global in its scope and coverage, the Garmin Pilot app features detail-rich interactive mapping and charts, advanced MFD-like navigation capabilities, complete global flight planning, and airport directory and weather briefing resources – plus available in-flight weather and traffic display link[1].

The app's easy-to-use menu icons mirror those of the newest Garmin touchscreen avionics — with a graphic interface that allows you to quickly pan across the display and pinch-to-zoom to scale the map view up or down. Using your unit's internal (or compatible external) GPS reference, Garmin Pilot provides en route navigation on its moving map display, while keeping track of your ETE, ETA, crosstrack error, distance to waypoint and more. Smart Airspace™ automatically highlights airspace features close to your current altitude[1], providing you with increased situational awareness. You can set airspace alerts that notify you before you enter selected airspace types[2]. And you can create a hold over an existing fix or custom waypoint and add search and rescue patterns, including parallel track, sector, expanding square, orbit or CAP grid, right to your flight plan[2].

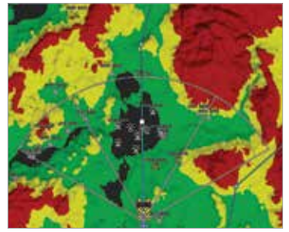
Look ahead to preview changing weather conditions along your route, while connected to the internet, a GDL® 52 series portable receiver or other Connext®-capable avionics. And the radar overlay on the moving map can display the projected path of a storm cell to show you where it's predicted to be in 15-, 30-, 45- and 60-minute intervals. The flight profile view even allows you to see the probability or severity of icing at particular altitudes. Plus, with a GDL 52 series receiver and a SiriusXM® aviation weather subscription, you can view the surface analysis report — including isobars, pressure systems, fronts, troughs and more — on the moving map.



Aircraft performance tables in Garmin Pilot make it easy to input figures for such calculations as power setting and fuel/distance profiles. Calculations take into account such factors as outside air temperature, altitude and more.



Make IFR flight planning and flying easier by adding airways and IFR procedures — including approaches, arrivals, departures and more — to your route.



A terrain and obstacle database provides high-resolution contour mapping to show your aircraft's proximity to potentially hazardous terrain or obstacles such as towers, while providing audible and visual cautions and warnings as you near these obstructions.



Garmin Pilot is global in scope. Its highlights for international pilots include available FliteCharts® for Europe, Canada and the U.S. – as well as DFS charts and detail-rich surface mapping with visual reporting points.

[1]Requires supported receiver
[2]Available on Apple devices
[3]Not intended to be used as a source of attitude information for flight in instrument meteorological conditions and should not be used under these conditions
[4]In addition to attitude, the GDL 52 series also provides built-in GPS positioning reference



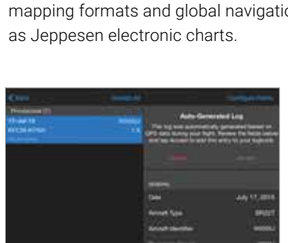
VFR sectional or IFR en route charts can be selected for navigation. On IFR flights, you can visualize, plan and fly terminal procedures, including departures, arrivals and approaches, and even add published crossing restrictions and custom altitude references to your flight plan — including a fix between two waypoints for a reminder of altitude changes. Procedure Selector allows you to more easily determine expected procedures and transitions by visualizing all options on a map. And with a few taps you can download all route data necessary for a flight before takeoff to ensure you have everything you need right on the device[2].

Garmin Pilot also allows you to establish personal minimums for VFR, IFR, and wind speed, gust and crosswind components in both day and night conditions. Plus, a unique radial menu offers easy on-screen access for creating user waypoints or navigating Direct-To, and you can view current weather conditions and airport/navaid information at a glance.

Global terrain and obstacle data, as well as obstacle alerting and detail-rich surface mapping with visual reporting points, is also available. In addition to U.S. charts, IFR and VFR aeronautical chart coverage is available for Europe and Canada, providing valuable information such as radio frequencies, airspace boundaries, landmark information and so on. Garmin Pilot also includes European VFR navigation data to support the unique needs of VFR pilots with airport traffic patterns, en route holding patters, TMZ/RMZ airpsaces and more[2]. As an option, Garmin Pilot is also available with mapping formats and global navigation data powered by Jeppesen® as well as Jeppesen electronic charts.

With Database Concierge, Garmin Pilot allows you to wirelessly update the aviation databases of your compatible avionics. At home you can simply select the individual databases on Garmin Pilot, download them and then store them to your mobile device. Then, at the airport, once your device establishes a wireless connection in the airplane, Garmin Pilot will transfer your up-to-date databases directly to the compatible avionics in minutes, where they'll wait in standby until their effective dates. This app-to-avionics interface really saves you time and tedious data entry – so you can complete your checklist items quicker and get airborne sooner.

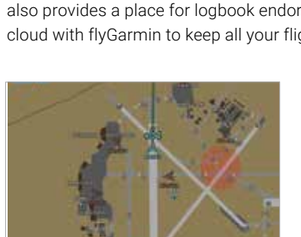
To further extend your tablet's capability, you can wirelessly link — via Garmin Connext — to a portable GDL 52 series receiver. That connection not only lets you access subscription-free weather and uplinked ADS-B traffic, but it also adds reliable backup attitude reference[3] to enable 3-D Vision with virtual terrain, horizon cues, HSI, airspeed, altitude and vertical speed reference all integrated on the flight display[4]. Along with this, the datalinked traffic is enhanced with our exclusive TargetTrend™ relative motion tracking technology to help you better visualize traffic trajectories and closing rates in relation to your flight path. You can even pinch-to-zoom on the traffic page to zoom in and out on traffic targets. And once you've landed, Garmin TerminalTraffic™ technology also enables ADS-B equipped surface targets to be displayed on the SafeTaxi® diagram so you can see what's happening, traffic-wise, on busy runways and taxiways. Better still, at the end of your flight, there's even a handy logbook feature in Garmin Pilot that will automatically capture and record your total flight time from takeoff to landing — as well as day/night recency for FAR requirements. This feature also provides a place for logbook endorsements, and it even syncs in the cloud with flyGarmin to keep all your flight entries up to date.



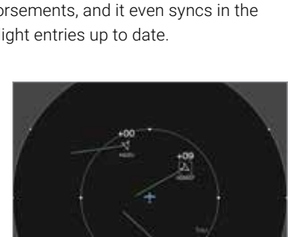
Garmin Pilot can serve as your electronic logbook. It tracks date, time, aircraft, arrival/departure airports, landings and more. Plus, it will automatically log your total time from takeoff to landing.



The exclusive NavTrack feature on the display lets you "look ahead" to preview changing weather conditions along your route of flight.



Optional SafeTaxi diagrams with georeferencing capability help you navigate on unfamiliar airports. With an optional GDL 52 series receiver, TerminalTraffic technology displays ADS-B equipped surface targets right on these diagrams.



With an optional GDL 52 ADS-B receiver, Garmin Pilot can display subscription-free weather and datalink traffic. Traffic displays with our patented TargetTrend technology that shows traffic trajectories relative to your aircraft.

FLY ANYWHERE, CONNECT ANYTIME



With the inReach® Mini 2 satellite communicator, plus an active satellite subscription, you can stay in touch everywhere you fly — from cross-country to the back country to far away from cell phone service. That means you can still send and receive messages, navigate your route, track and share your journey with friends and, if necessary, trigger an SOS to get emergency help and more — all on the global Iridium® satellite network[1].

Pair the inReach® Mini 2, our lightest weight, most compact satellite communicator, via BLUETOOTH® technology to a compatible tablet or smartphone running Garmin Messenger™ smart-device app, and you can easily send and receive text messages while in the cockpit. The app even pulls in your smart device's contact lists, which makes it simple and seamless.

And because your inReach Mini 2 is also a handheld GPS, the Garmin Pilot™ smart-device app can leverage its rock-solid position source to provide high-resolution position information to your tablet's moving map display. Plus, for your followers on the ground, inReach Mini 2 can provide tracking of your flight — using the web-based MapShare™ page created for your inReach account or via FlightAware.com. You can also link via Facebook® or Twitter®.

Your inReach Mini 2 also offers automatic monitoring provided by the SE-SAR service, which allows the system to identify potential emergency signals to promptly initiate search and rescue procedures for your aircraft. Likewise, it's also a supported device for the Flight Service Adverse Condition Alerting Service (ACAS). If you register for ACAS information, alerts provided via Flight Service prompt you to call for an abbreviated briefing to address specific adverse conditions that might affect your flight-planned routing.

And inReach Mini 2 is tough, durable, impact-resistant (MIL-STD-810F) and water-resistant[2], and it's built to keep you ready for any flight. It includes an internal, rechargeable lithium battery for up to 14 days use at the default 10-minute tracking mode and up to 30 days in power-saving mode. And you can recharge via the microUSB power cable or optional in-vehicle 12-V charger.

An active satellite subscription is required to access the Iridium network and communicate with your inReach device. Options based on your usage level allow you to opt for an annual contract package or flexible month-to-month airtime plan.

KEEP IN TOUCH WITH CONVENIENT MESSAGING



With the inReach® Messenger satellite communicator[1], home is closer than you think. Providing global two-way messaging and interactive SOS, it keeps you connected with friends and family even when you're out of cell range.

Use the device to check in with contacts, read and reply to their responses with preset messages, and even share your GPS location data if you like. More detailed texting and group messaging are easy when using the Garmin Messenger smart-device app. Or send and receive messages by using your D2™ Mach 1 aviator smartwatch, compatible Garmin handheld or other devices.

You can also seamlessly switch between satellite and cellular/Wi-Fi® wireless networks — when you're not off the grid but have people messaging you through inReach — giving you superior connectivity and cost-effective options for all your communications. And the on-device display gives you the added confidence of knowing that your message has been sent. You'll even see a response that help is on the way in case of emergency. The communicator's internal, rechargeable lithium battery gives up to 28 days of battery life in 10-minute tracking mode — and provides safety charging to help recover a depleted phone.

[1]Active satellite subscription required. Some jurisdictions regulate or prohibit the use of satellite communication devices. It is the responsibility of the user to know and follow all applicable laws in the jurisdictions where the device is intended to be used.
[2]See Garmin.com/waterrating
Twitter is a registered trademark. Wi-Fi is a registered trademark of the Wi-Fi Alliance.


BOSE
AVIATION ALERTS
Alerts On
KMKC
TWR: 133.300
WX: 120.750
SUNSET IN 3H 55M
7:18a
18.7nm
032°





D2™ MACH 1 PRO. LIGHT YOUR WAY WITH A TRULY PROFESSIONAL FLIGHT TOOL.

Be ready for takeoff, day or night, with the D2 Mach 1 Pro premium aviator smartwatch. In addition to putting true global navigation capability on your wrist, this larger, enhanced version of the popular D2 Mach 1 model features a built-in LED flashlight that throws a steady beam of illumination in either red light or variable intensities of white light to help guide your way. And for comfortable readability in a darkened cockpit or other low-light environments, the watch's 1.4" AMOLED touchscreen display is equipped with red shift mode to filter out blue light to help you maintain your night vision.

Using a built-in worldwide aeronautical database, the D2 Mach 1 Pro lets you access our signature Direct-to and Nearest routing functions by simply pressing either dedicated button. You can view your flight path on the watch's full-color moving map — or follow the instrument-like HSI course needle to your destination. With up to 25 hours of battery life, this smartwatch has plenty of staying power for long cross-country flights. It also works wirelessly with your compatible smartphone to access location-based meteorological reports (METARs), MOS forecast models (U.S. airports only) and terminal forecasts (TAFs), as well as NEXRAD radar overlaid on the moving map. This interface lets you easily access the data you need for smart decision making. On-wrist vibration alerts let you know when you've drifted off course or reached your selected altitude. Plus, you can easily access airport info, such as runway orientation, wind components[1], lengths and airport frequencies. A baro-based O2 altitude alert feature will vibrate to remind you when supplemental oxygen is required above 12,500' — and the watch's wrist-based Pulse Ox sensor lets you monitor your body's adaptation to different altitudes and oxygen levels while in flight[2].

Once your flight ends, the watch's automatic flight-logging feature makes recordkeeping simple by automatically transferring the date, duration, total flight time and route to your flyGarmin.com logbook[1]. Then, when it's time to prep for the next flight, the D2 Mach 1 Pro helps simplify the process by enabling seamless transfer of flight plans to your watch from the Garmin Pilot™ smart-device app. Once transferred, all the waypoints on the flight planned route can be listed, viewed and used for navigation right on your smartwatch.

Outside the cockpit, your watch supports a wide range of health and fitness features for your active lifestyle. More than 30 built-in sports apps give you plenty of ways to boost your fitness. Plus, built-in health monitoring features include wrist-based heart rate[3] (with user-configurable alerts for high or low readings), advanced sleep monitoring, all-day stress tracking, Body Battery™ energy monitoring, hydration and more.

To keep you connected on the go, your watch supports smart notifications for calls, texts, calendar reminders, social media updates, breaking news stories and more[1]. Built-in music storage lets you download songs and podcasts from your favorite providers — including Spotify®, Amazon Music and Deezer[4] — and then connect to your audio panel or use with wireless headphones (sold separately) for phone-free listening. As you go through your day, Garmin Pay™ contactless payments offer an easy way to make purchases and breeze through checkout lines using only your smartwatch for payment[5].

Designed for dedicated aviators, the rugged D2 Mach 1 Pro combines premium top-grade materials — such as sapphire crystal and titanium — with our most advanced wearable technology to offer you unmatched utility, both in and out of the cockpit.

D2 MACH 1 PRO SPECIFICATIONS

Lens material	Sapphire crystal
Bezel material	Titanium with a scratch-resistant DLC
Case material	Fiber-reinforced polymer with titanium rear cover
QuickFit® watch bands	Included (26 mm)
Physical size	51 x 51 x 15 (mm)
Weight	126 g (case only: 60 g)
Water rating	10 ATM
Display type	AMOLED; optional always-on mode
Display size	1.4 in (35.56 mm) diameter
Display resolution	454 x 454 pixels
Battery life	Smartwatch mode: up to 25 days (10 days always-on) Battery-saver smartwatch mode: up to 41 days GPS only: up to 82 hours (58 hours always-on) All satellite systems: up to 62 hours (48 hours always-on) All satellite systems + multi-band: up to 38 hours (30 hours always-on) All satellite systems + music: up to 17 hours Max battery GPS: up to 145 hours Expedition GPS: up to 27 days Fly activity (GPS + SpO2): up to 46 hours

[1]When paired with your compatible smartphone; see Garmin.com/ble • [2]This is not a medical device and is not intended for use in the diagnosis or monitoring of any medical condition; see Garmin.com/ataccuracy. Pulse Ox not available in all countries. • [3]See Garmin.com/ataccuracy • [4]May require premium subscription by a third-party music provider • [5]View current supported country, payment network and issuing bank information at Garmin.com/GarminPay/banks

SPOTIFY and the Spotify logo are among the registered trademarks of Spotify AB.
Amazon Music and all related logos are trademarks of Amazon.com, Inc. or its affiliates.



D2 MACH 1 SPECIFICATIONS

Lens material	Sapphire Crystal
Bezel material	Titanium
Case material	Fiber-reinforced polymer with titanium rear cover
QuickFit™ watch bands	Included (22 mm)
Strap material	Leather Version: Italian Leather and Silicone Titanium Version: Titanium and Silicone
Physical size	47 x 47 x 14.5 (mm) Fits wrists with the following circumference: Silicone Band: 125-208 mm Leather Band: 132-210 mm Titanium Band: 132-215 mm
Weight	70g (case only: 47g)
Water rating	10 ATM
Display type	AMOLED; optional always-on mode
Display size	1.3" (33.02 mm) Diameter
Display resolution	454 x 454
Battery life	Smartwatch: up to 11 days (4 days always-on) Battery Saver Watch Mode: up to 21 days GPS Only: up to 42 hours (30 hours always-on) All Satellite Systems: up to 32 hours (24 hours always-on) All Satellite Systems + Multi-band: up to 20 hours (15 hours always-on) All Satellite Systems + Music: up to 10 hours (9 hours always-on) Max Battery GPS: up to 75 hours Expedition GPS: up to 14 days Fly Activity (GPS + SPO2): up to 24 hours

D2™ MACH 1. CLASSIC STYLE. WITH OUR MOST ADVANCED AVIATION SMARTWATCH CAPABILITIES EVER.

Accelerate the adventure with D2™ Mach 1. We've elevated the performance of our premium GPS aviator smartwatch to take wrist-based technology to entirely new levels of capability. So you can enhance your flying experience — and enjoy your airborne exploration more.

D2 Mach 1 offers an AMOLED touchscreen for amazing readability, even in bright sunlight. Its aviation-themed watch face has seven user-customizable data fields. And it puts powerful piloting tools at your fingertips.

Navigate Direct-to a location or waypoint in the worldwide aeronautical database or use the Nearest function to activate a path to a nearby airport. Pan across the moving map with a swipe and tap waypoints for more information. Use the HSI to help stay on course — or access emergency mode to help find an airport quickly in the event of an engine power loss. View airport information, with runway orientation (including wind components[1]), lengths and airport frequencies. See aviation weather, including METARs, TAFs, MOS[2] and NEXRAD radar, and configure alerts to keep you informed about newly released reports and more[1]. Use the Pulse Ox[3] sensor to monitor your blood oxygen levels at altitude and the barometric altimeter to set alerts for when to use oxygen. Connect with the Garmin Pilot™ app downloaded to your compatible smartphone to transfer flight plans to the watch — and automatically log your flights on your flyGarmin.com® account[1] after you land. And pair with your inReach® device[4] to notify your loved ones of your takeoff and landing — or operate in tactical stealth mode to stop storing and sharing your GPS position and disable wireless connectivity.

D2 Mach 1 also helps ensure you're ready for your next flight with health and wellness features — including Health Snapshot™, Body Battery™ energy levels, sleep score and stress tracking[5]. Switch up your fitness activities with more than 30 built-in sports apps and animated workouts. Download up to 650 songs, including playlists from Spotify, Amazon Music or Deezer (premium subscription may be required), and connect to your wireless headphones for phone-free listening[6]. Use our Garmin Pay™ contactless payment solution[7] to pay for purchases while leaving your cash and cards at home. And do it all with up to 11 days battery life in smartwatch mode or up to 24 hours in GPS + Pulse Ox mode (fly activity).

[1]When paired with a compatible smartphone and in range of BLUETOOTH® technology • [2]Available only in the U.S. • [3]This is not a medical device and is not intended for use in the diagnosis or monitoring of any medical condition; see Garmin.com/ataccuracy. Pulse Ox not available in all countries. • [4]Active satellite subscription required. Some jurisdictions regulate or prohibit the use of satellite communication devices. It is the responsibility of the user to know and follow all applicable laws in the jurisdictions where the device is intended to be used. • [5]See Garmin.com/ataccuracy • [6]Requires compatible BLUETOOTH listening device (A2DP BLUETOOTH profile) • [7]See current supported country, payment network and issuing bank information at Garmin.com/GarminPay/banks

The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.



D2™ AIR X10. THE EVERYDAY GPS SMARTWATCH FOR PILOTS.

Navigate your life with a smartwatch designed to keep up with you — from your workout to the office to your next flight. The beautiful AMOLED touchscreen display brings the watch to life, even in a bright cockpit. Two color options let you match your style. And the aviation-themed watch face shows your passion for the sky.

D2 Air X10 is packed with piloting tools you'll want preflight, in-flight and postflight. Access METARs and TAFs[1], and see airport information, including frequencies and pattern altitudes. Select Nearest for headings to the closest airport — or Direct-to and navigate to your destination — then check your course with the HSI. Transfer your flight plan from the Garmin Pilot™ app[2] to D2 Air X10 and view the list of waypoints included in your route. Reference the baro-adjustable altimeter and set alerts and timers for inflight tasks — such as using supplemental oxygen or changing fuel tanks. And monitor your Pulse Ox[3] to gauge how your body is adjusting to altitude. Back on the ground, D2 Air X10 automatically logs flight activities and uploads them postflight to your flyGarmin.com® account[1].

D2 Air X10 also fits perfectly around town. When paired with your compatible smartphone, you can enjoy the convenience of making and taking calls right from your wrist[4]. You can even use your smartphone's voice assistant to respond to text messages[4]. Track your wellness with advanced health and fitness features, including Health Snapshot™, Body Battery™ energy levels, sleep score and insights, and stress tracking[5]. Switch up your activities with more than 25 built-in sports apps, animated workouts and Garmin Coach training plans. Store your favorite music and connect to your wireless headphones for phone-free listening[6]. Use Garmin Pay™ contactless payment when you shop[7]. And D2 Air X10 matches your energetic pace with exceptional battery life — including up to 7 days in smartwatch mode or up to 20 hours in GPS mode with Pulse Ox (fly activity).

D2 AIR X10 SPECIFICATIONS

Lens material	Corning® Gorilla® Glass 3
Bezel material	Stainless Steel
Case material	Fiber-reinforced polymer with stainless-steel rear cover
Quick release bands	Yes (20 mm, Industry standard)
Strap material	Silicone
Physical size	43.6 x 43.6 x 12.6 mm Fits wrists with a circumference of 125-190 mm
Weight	51.0 g
Water rating	5 ATM
Display type	AMOLED; optional always-on mode
Display size	1.3" (33.0 mm) diameter
Display resolution	416 x 416 pixels
Battery life	Smartwatch mode: up to 7 days Battery Saver Smartwatch Mode: up to 10 days GPS mode with music: up to 8 hours GPS mode without music: up to 24 hours GPS + SPO2: up to 20 hours

[1]When paired with a compatible smartphone and in range of BLUETOOTH® technology • [2]Requires app on your compatible smartphone paired to the D2 Air X10 • [3]This is not a medical device and is not intended for use in the diagnosis or monitoring of any medical condition; see Garmin.com/ataccuracy. Pulse Ox not available in all countries. • [4]Certain smartphones are not compatible with voice functionality features; see Garmin.com/VoiceFunctionality • [5]See Garmin.com/ataccuracy • [6]Requires compatible BLUETOOTH listening device (A2DP BLUETOOTH profile) • [7]See current supported country, payment network and issuing bank information at Garmin.com/GarminPay/banks

The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.



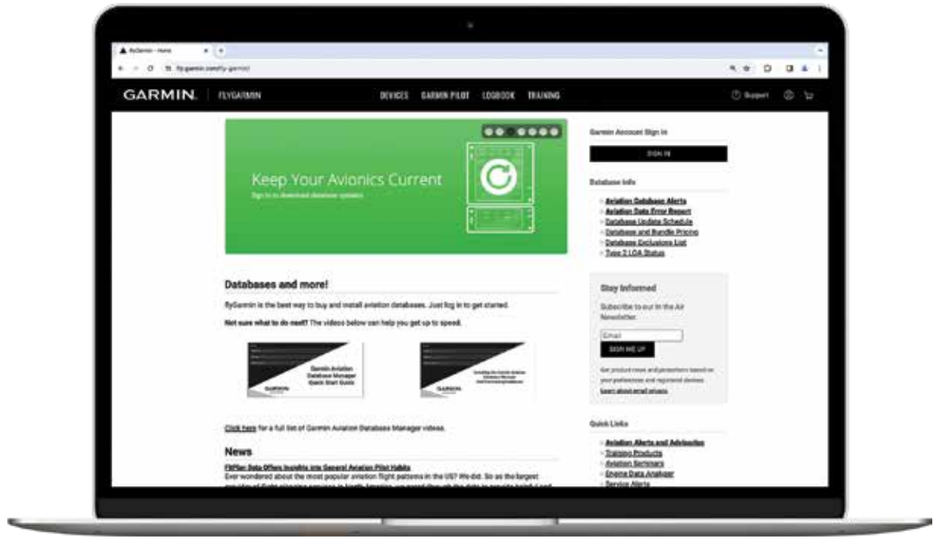
HIGHER-PRECISION GPS FOR YOUR TABLET OR MOBILE DEVICE WITH GARMIN GLO™

If you've tried to do airborne navigation with the typical built-in GPS on many of today's tablet computers or other smart devices, you know how frustrating that can be. Too often these units simply aren't up to the task of providing the robust, high-precision guidance you expect from a Garmin-grade GPS navigator. That's why it makes sense to upgrade your signal with a Garmin GLO™ portable receiver. This light, compact, easy-to-use portable solution is able to receive its position information from both GPS and GLONASS constellations, adding 24 extra satellites to the mix – and assuring you of the best, most accurate positioning solutions worldwide. Your GLO wireless sensor can lock on to satellites some 20% faster than most single-network receivers. And its high-capability 10 Hz receiver updates its position information up to 10 times more frequently than the garden-variety GPS sensors used in many mobile devices. GLO works seamlessly with a variety of apps, including Garmin Pilot™, to turn your Apple iPad® or other Apple®- or Android™-based mobile device into a true go-anywhere moving map navigator. In fact, your GLO even comes with a 6-month free trial of our Garmin Pilot™ app to make your choice even simpler.

Featuring easy BLUETOOTH® connectivity, the GLO pairs wirelessly with up to four compatible devices simultaneously. Just set GLO within range of your mobile device, and in moments you'll be receiving GLO's enhanced position data. With up to 13 hours of battery life, your GLO can go a long, long way between recharges. And even then, charging your GLO between uses is easy with the included USB cable or optional 12/24 volt cigarette lighter adapter. For optimum reception, an optional friction mount is available to keep your GLO safely positioned atop your aircraft's panel – in full view of all available satellites, both foreign and domestic. Garmin GLO: It's all about bringing you the best of both worlds in satellite-based portable navigation.

SPECIFICATIONS

Receiver	WAAS-enabled GPS plus GLONASS
Update rate	10 Hz
Accuracy	+/- 3 meters
Battery life	Up to 13 hours
Size	0.70"W x 1.65"H x 3.04"D
Weight	2.12 oz (60.1 g)



MANAGE YOUR DATABASE SUBSCRIPTIONS, LOGBOOKS AND MORE WITH FLYGARMIN.COM

Your Garmin GPS comes complete with an extensive aviation database. It's the mainstay of your unit's moving map navigation capabilities. In addition, other databases found on select Garmin portables include Garmin FliteCharts®, SafeTaxi®, Airport Directory, plus terrain alerting, towers/obstacles databases and much more.

Over time, as airport and airspace information changes, your databases will require updating. Fortunately, Garmin makes the process easy. Just create an account on flyGarmin.com and purchase your databases. Your device will automatically update when it connects to your Wi-Fi® network.

As an added incentive, Garmin's bundled pricing program for the aera® series navigators offers multi-database annual updates at a cost of up to 50% less than data sets purchased individually. From the moving-map navigation data, obstacles and terrain databases to graphical FlightCharts®, SafeTaxi® and AOPA Directory information, Garmin's new portable update packages make it easier and more affordable to keep all your aviation databases up to date. Spending less while getting more: That's what Garmin value is all about.

Wi-Fi is a registered trademark of the Wi-Fi Alliance.



FLY WITH WEATHER, TRAFFIC AND GPS WHILE WATCHING YOUR ATTITUDE

The GDL® 52 portable receiver is the ideal 1-box, dual-network solution for your flying. Now, with this compact antenna/receiver in your aircraft, you have access to a whole new level of "glass cockpit" type flight information. Providing an easy-to-use and totally portable aviation satellite link, the GDL 52 combines SiriusXM® Aviation service coverage — accessible from ground or air — with the subscription-free weather and traffic features of an ADS-B "In" datalink[1]. Together, these two network link technologies bring a world of safety-enhancing features, plus access to more than 150 channels of digital-quality music, news, sports and other entertainment programming[2] directly to your cockpit.

Continuous SiriusXM satellite updates — accessible by ground and air — help you make better, more timely flight decisions. The SiriusXM network's powerful satellites deliver seamless coverage across the continental United States and its coastal regions, as well as southern Canada. Choose from available SiriusXM Aviation packages that provide METAR data and animated NEXRAD imagery, plus current reports on precipitation, lightning, winds aloft, echo tops, turbulence, freezing levels, TFRs and more.

Using the Garmin Pilot™ app, you can view all this data on your Apple iPad® or other compatible Apple® or Android™ devices[3]. And you can even split the display on your iPad screen to show traffic and weather overlaid on the moving map, while monitoring your backup attitude on synthetic vision (SVX). It's like having a virtual flight deck you can pack in your flight bag. Similarly, if you own an aera® 660/760 or 796/795 series portable, the GDL's weather and traffic uplinks are also compatible with these products, and it will provide Garmin SVX™ synthetic vision and attitude command bar functionality as well.

On the audio entertainment side, you can simply sync a compatible headset enabled with BLUETOOTH® technology with your GDL 52 to wirelessly access an industry-leading digital playlist with audio-entertainment channels tailored to your tastes and interests. If you prefer, you can also opt to hardwire the GDL 52 through your compatible audio panel (or use the wireless connectivity of Garmin Connext®) for routing through the cabin headsets. A 3.5 mm audio jack positioned on the side of your GDL 52 makes it easy to provide audio out to an auxiliary source or audio panel in your aircraft.

You can gain addition awareness options with the GDL 52, including continuously broadcasts in the U.S. of ADS-B weather on the 978 MHz universal access transceiver frequency, so you can access NEXRAD imagery, METARs, TAFs, winds and temperatures aloft, PIREPs, NOTAMs and more[4]. Along with this, you can also receive ADS-B traffic position reports (and threat-level symbology) to help you see and avoid converging targets in busy airspace. Spoken audio alerts call out potential flight path conflicts ("Traffic, traffic.") to get you looking right away. Meanwhile, on your screen, our patented TargetTrend™ relative motion display[5] offers a faster, more intuitive way of judging target trajectories and closure rates in relation to your flight path. As an added safety feature, Garmin TerminalTraffic™ technology supports the display of ADS-B equipped surface targets on the map screen to help you keep track of other aircraft or ground vehicles that may be moving in your vicinity on the airport.

The GDL 52 is by far one of the simplest and smartest ways to gain the benefits of ADS-B technology. It's a dual-link system, so it can receive on both ADS-B frequencies (978 MHz and 1090 MHz) authorized for ADS-B operations in the U.S. However, for best traffic uplink results, your aircraft needs to be a "participant" in the ADS-B system and have an approved ADS-B "Out" system (such as a 1090 MHz extended squitter transponder) on board. The GDL 52 does not provide this "Out" function, but it can serve as an affordable "In" receiver to access the benefits of ADS-B weather and traffic data, subscription-free.

Of course, depending on your needs, you can also consider the compact GDL® 51 SiriusXM receiver, which lets you access continuous aviation weather information, in-flight entertainment programming, and other GPS, speed and altitude features of the GDL 52, but without ADS-B "In" access. Or you may consider the GDL® 50, which provides ADS-B "In" and GPS, speed and altitude data, without SiriusXM access or subscriptions. Whichever model in the GDL 52 series you choose, you'll always get a versatile datalink solution with a wide array of additional capabilities to help you increase your situational awareness and enjoy your flying more.

SPECIFICATIONS

Operating temp	-20°C to +60°C (-4°F to 140°F)
Operating altitude	To 55,000 ft
Power input	10 to 32 VDC; 3.5 W max
Battery type	Lithium-ion rechargeable (built-in)
Battery life	Up to 5 hours with GDL52 Up to 7 hours with GDL 51 Up to 8 hours with GDL 50
Unit size	4.9" W x 1.3"H x 3.4"D
Weight	0.75 lbs (0.34 kg)

[1]The GDL 52 is a noncertified receive-only product; it does not provide ADS-B "Out" capability to satisfy FAA mandate requirements
[2]SiriusXM subscription required (sold separately); see SiriusXM.com/aviation
[3]See Garmin website or dealer for our growing list of compatible devices
[4]Not all FIS-B weather products may be available on all Garmin displays; please check your Pilot's Guide for the specifics on your product
[5]Both the audible traffic alerting feature and TargetTrend require compatible displays; please check your Pilot's Guide for specific capabilities available on your display



PORTABILITY MEETS CONNECTIVITY WITH GARMIN CONNEXT®

Whether it's a datalink that brings weather and traffic information from a nationwide ADS-B network or a localized BLUETOOTH® wireless connection between individual devices, wireless technology is revolutionizing how pilots use and connect with their portable devices in the cockpit. Garmin's flight data connection services (known collectively as Garmin Connext) provide the means to wirelessly link people, devices and information – on the ground and in the air.

For example, you can use Connext – via one of the Garmin Flight Stream series of cockpit-mounted transceivers – to stream information in real time between your Apple iPad® (or other compatible mobile device) and your avionics. Using our Garmin Pilot™ app, it's easy to preload flight plan data onto your tablet or smart device, whenever and wherever it's convenient. Then, once you're ready to go to the airport, use Connext to wirelessly upload the data – waypoints, airway routings and all – into your plane's compatible avionics during preflight. It's fast. It's easy. It's seamless. And, even better, keeping flight plans in sync between your device and your avionics is a cinch: You enter the data on one device, and with a tap or two, your entries are automatically transferred to the other. So there's no duplication of effort on your part when it comes to keeping everything in sync. Moreover, by streaming data from your avionics to your iPad, you can also integrate the tablet's map and flight displays with graphical weather, traffic, GPS position reference, and backup attitude reference[1] and 3-D synthetic vision displays – virtually turning your mobile device into a touchscreen flight display.

As you can see, today's aviation world is becoming a far more interactive, information-driven environment than ever before. Which is why you'll be seeing more and more Garmin portable products with Connext capability built right in – allowing wireless access, control and sharing of information between multiple devices.

In so many ways, both large and small, the links made possible by Garmin Connext are already redefining how pilots view, control and access all their electronic connections in the cockpit.



In addition to ADS-B weather and traffic, you can also view 3-D synthetic vision and backup attitude reference[1] provided by the GDL® 39 3D portable ADS-B receiver.



Using the Garmin Pilot app on your mobile device, you can link and view text messages, calendar notifications and other alerts on your D2™ series pilot watch.

[1]Not intended to be used as a source of attitude information for flight in instrument meteorological conditions and should not be used under these conditions

TOTAL SUPPORT AT YOUR FINGERTIPS

Pilots are attracted to our GPS portables for any number of valid reasons — innovative designs. Quality construction. Useful features. Smart technology. Compact size. Value pricing. Simple operation.

But, in the end, it's the total support we put behind every product in our lineup that turns first-time Garmin buyers into loyal, long-term Garmin customers.

We want you to have a great user experience with any and every Garmin product you select.

- That's why every Garmin product is warranted to be free from defects in materials or workmanship for one full year from your date of purchase.
- That's why you'll find more than 700 authorized service centers standing by to support our aviation customers in virtually every corner of the globe.
- And that's why Garmin attracts and hires some of the industry's brightest technical minds to serve in our factory support positions. They're also pilots who speak aviation. And their troubleshooting expertise is available by phone or online – whenever you have a question or service issue that demands the right answer, right now!

No other manufacturer does more to put total navigation confidence at your fingertips.



GARMIN INTERNATIONAL, INC.

Garmin.com/aviation

1200 East 151st Street, Olathe, KS 66062
p: 866.739.5687 f: 913.397.8282

GARMIN (EUROPE) LTD.,
Liberty House, Hounsdown Business Park
Southampton, Hampshire, SO40 9LR, U.K.
p: +44 (0)87.0850.1243 f: +44 (0)23.8052.4004

GARMIN SINGAPORE PTE. LTD.,
46 East Coast Road #05-06, Singapore 428766
p: 65.63480378 f: 65.63480278
e: avionics.asia@garmin.com

©2024 Garmin Ltd. or its subsidiaries. All rights reserved
Specifications and descriptions are preliminary and subject to change without notice.
Sirius, XM and all related marks and logos are trademarks of SiriusXM Radio Inc.
Wi-Fi is a registered trademark of the Wi-Fi Alliance.
iPad, iPhone and Apple are trademarks of Apple Inc., registered in the U.S. and other countries.
Android is a trademark of Google LLC.
Jeppesen is a registered trademark of Jeppesen Sanderson, Inc. its subsidiaries or affiliated companies.
The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.

M02-10114-00 0224