Avidyne's IFD540 & IFD440

FMS/GPS/NAV/COMs combine the best Flight Management System available, with a multi-channel digital VHF radio, in an easy-to-use, plug & play design.

The Easy Choice

The **IFD540** & **IFD440** represent the next generation in FMS/GPS/NAV/COM systems. Each provides VHF communication and SBAS/LPV precision navigation and are designed to meet the accuracy and integrity requirements for ADS-B as part of the NextGen airspace initiative. As plug-and play replacements for legacy systems, the IFD540 & IFD440 each share the same basic functionality in large and compact display formats respectively.

When it comes to panel-mounted avionics, you now have a choice and the choice is easy. **Avidyne**.

Hybrid Touch: Knobs & Buttons or Touch-Screen

Our award-winning Page & Tab user interface allows you to go to any page in the system with only one or two clicks.

In addition to the dedicated knobs and buttons that many pilots prefer for frequent pilot actions, the **IFD540** & **IFD440's** Hybrid Touch capability allows pilots to perform virtually all of those same functions via the touch-screen interface, as well as providing additional MultiTouch functionality like pinch-zoom, map panning, and graphical flight plan editing, allowing the pilot to decide to use the MultiTouch screen, or knobs and buttons depending on the pilot's phase of flight.

Avidyne's unique Hybrid Touch user interface eliminates nested menus and allows pilots to view any page with only one or two clicks.

Plug & Play Replacements

The **IFD540** & **IFD440** are physical plug & play replacements for the Garmin GNS530 and GNS430 respectively, using the existing tray and connectors, and they are compatible with all the popular interface configurations, which can greatly minimize installation costs.

Actual size.

MEETS SIMPLICITY

Made by Pilots for Pilots

The **IFD540** & **IFD440** were designed for ease of use, especially during single-pilot IFR operations. As avid and enthusiastic pilots, we at Avidyne understand the importance of workload reduction and simplicity of operation.

The IFD540 & IFD440 provide an easy page & tab user interface, plus advanced radio management including automated NAV frequency tuning and COM frequency nomination, automatic frequency identification, easy-to-modify graphical flight planning, and Avidyne's exclusive GeoFill™ waypoint nomination.

Flight Planning Has Never Been Easier

Entering an IFR flight plan is easier than ever with the **IFD540** & **IFD440**. Extensive testing and customer experience have proven that the IFD540 & IFD440 user interface reduces button pushes and knob twists required with previous navigators by 50%-75% or more. Drop-down menus are logically placed to provide easy data entry of airways, exit waypoints, destinations, and approach procedures.
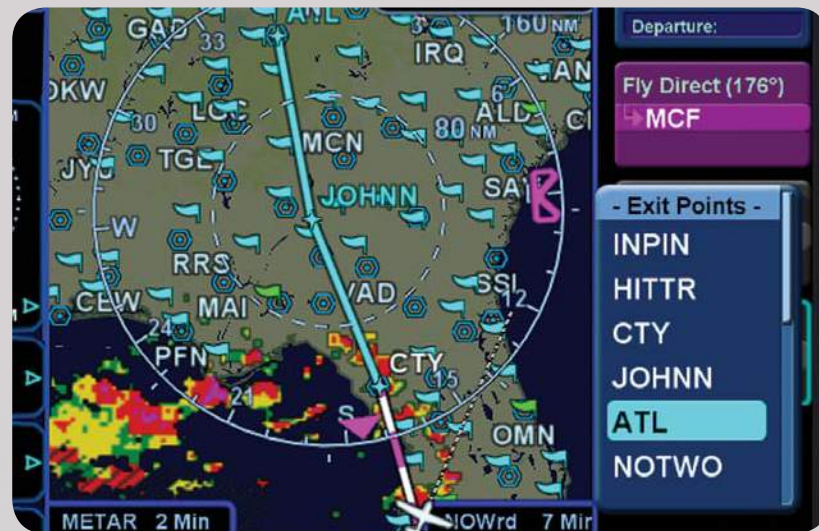
Graphical Flight Plan Editing

With the **IFD540 & IFD440's** graphical flight planning capability, you can easily edit your flight plan with the touch of the screen. The 'rubber banding' feature allows you to stretch any leg in the flight plan to make a deviation for weather or to accommodate an amendment from ATC.

FMS Preview

Avidyne's exclusive FMS Preview™ is a powerful flight planning feature that makes it even more intuitive to load flight plans by showing you a real-time graphical depiction of each proposed modification in cyan prior to selection. FMS Preview makes it easy to visualize before selecting a desired waypoint, airway, hold or hold geometry, Direct-To, approach, approach transition and any other terminal procedures.

Easy Loading of Approaches

The dedicated PROC (Procedure) button allows you to quickly load approaches at your destination airport by selecting from the intuitive pop-up list on the map. FMS Preview allows you to view each of the available approaches graphically prior to selection. Unlike previous-generation navigators, the IFD540 & IFD440 allow you to quickly load any number of destination airports and multiple approaches into your flight plan.

Working Well Together

The **IDF540 & IFD440**, when paired in any combination, leverage Avidyne's Entegra Release 9 Byteflight databus architecture. A **Keyboard Convenience** feature allows for data entry on a QWERTY keyboard that automatically appears when an alpha-numeric data field is highlighted, making data entry as familiar to you as your computer or smart phone. With GeoFill, the IFD540 & IFD440 will virtually always guess accurately your next waypoint after only entering one or two letters.

In dual installations, the dual-databus architecture allows pilots to enter the flightplan on the QWERTY keyboard of one unit, while viewing the Map on the other.

Entering a Hold is Easy

You can easily enter and fly a Hold at any waypoint, including VORs, intersections, user-defined waypoints, airports, etc. The FMS will default to a standard hold pattern at current Heading, and all parameters are easily editable.

"Next Leg" Depiction

On the map, the current leg you are flying is always depicted as a solid magenta line. To give you a clear indication of your next leg, the IFD540 & IFD440 will display a magenta & white "candy cane" line, which is especially handy during entries into a holding pattern.
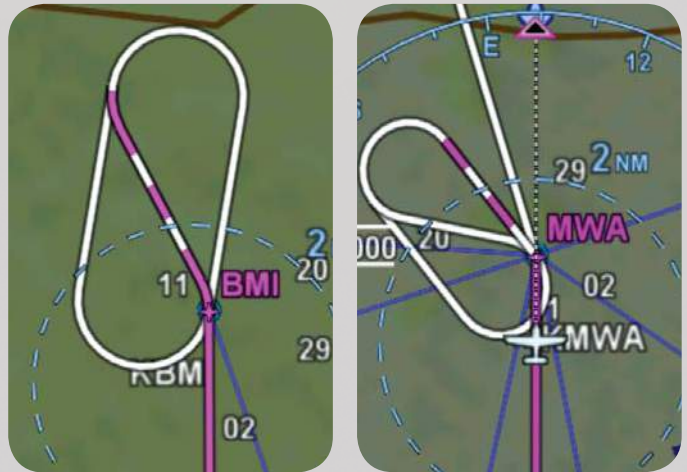
Quick Access to Info You Need

The IFDs feature a convenient Side Tab, so you can quickly view your Data page, Flightplan, or Nearest Airports while viewing the Map.

While in FMS mode, you can access your MAP any time simply by clicking or dragging the side tab.

Communications

Managing your radios is easy with the **IFD540 & IFD440**. Frequencies can easily be entered either by rotating the dual knobs on the left, or by using the touch-screen numeric keypad. COM frequencies can also be tuned directly by touching the displayed frequencies on Info, Nearest, and Frequency List pages.

The IFD540 & IFD440's powerful FMS automatically nominates, auto-tunes, identifies, and monitors the NAV radio frequencies, so you may never have to tune another VOR or ILS frequency again! Should you choose to do so, manual tuning is easily completed with the pop-up numeric key pad or by simply typing the identifier for the VOR.

Easy Radio Tuning

Touching any frequency in the Info list, Freq page, or Nearest page automatically transfers it into the Standby window.

Multiple Frequency Formats & Station Readout

Communications are greatly improved with the IFDs. You can configure your unit(s) to have multiple standby frequencies, decoded agency identifiers, and Rx/Tx Indicators.

The **IFD540 & IFD440** decode the active and standby frequencies based on proximity in the database and display the names of the stations in plain English, providing a handy reminder of the agency to which you will be transmitting when pressing the push-to-talk button.

Low-Fuel Protection

When the IFD is connected to a compatible Fuel Totalizer System, the IFD will display a green Fuel Range Ring, indicating a fuel reserve of 45 minutes.

A dashed green circle indicates a maximum range without reserve.

Electronic Approach Charts & Airport Diagrams

The IFD540 includes CMax™ Approach Charts & Airport Diagrams. Utilizing Jeppesen's Jeppview® charts subscription services, CMax provides Worldwide approach charts and a database of over 6,000 airport diagrams, most of which are geo-referenced, allowing for the display of your ownship and flight plan position right on the chart or airport diagram.
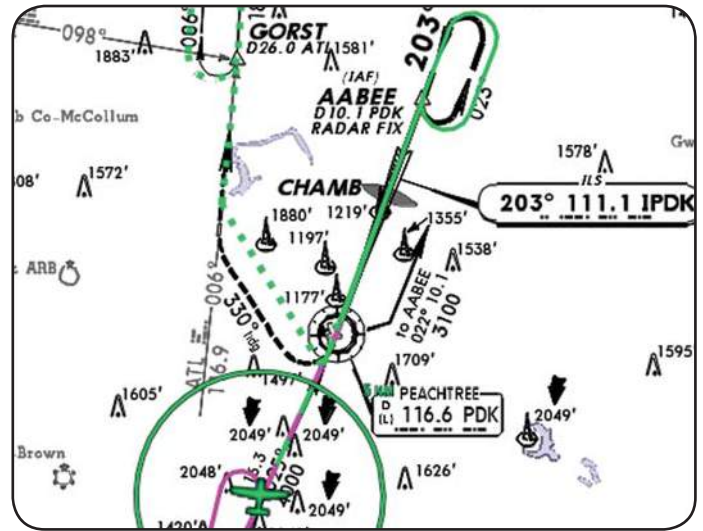
Terrain Awareness

The IFD540 & IFD440 include Terrain Awareness which can be displayed over the color-contoured terrain base map for easy pilot recognition of an imminent encounter with nearby terrain. Caution Alerts are provided when a collision with terrain is projected within approximately 60 seconds, and Warning Alerts are provided for terrain projected within approximately 30 seconds. FLTA provides aural alert messaging as well.
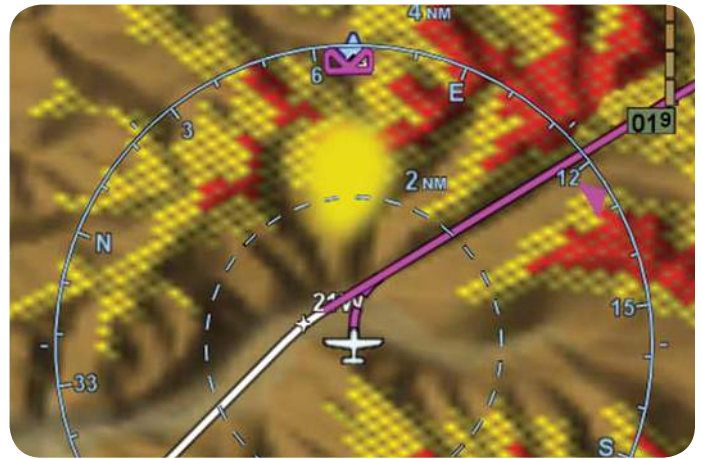
The Forward Looking Terrain Alerting (FLTA) capability provides a solid yellow or red impact point based on flight path projection.

Made for Each Other

Built on a dual databus architecture, the **IFD540** & **IFD440** are key components in Avidyne's new panel-mounted plug & play avionics suite, which also includes the **AMX240** Audio Panel, **AXP340** ADS-B Extended Squitter Mode S Transponder, and **DFC90** Digital Autopilot.

Specifications

Display

IFD540
- 5.7" Diagonal w/Touch Screen
- Full VGA - 640 x 480 pixels

IFD440
- 4.8" Diagonal w/Touch Screen
- 640 x 235 pixels

- 65,535 colors
- Ultrabright sunlight readable w/LED Backlighting

Dimensions

IFD540
- Width: 6.30" (16.0cm)
- Height: 4.60" (11.7cm)
- Depth: 11.00" (27.5cm) behind panel including connectors

IFD440
- Width: 6.30" (16.0cm)
- Height: 2.66" (6.8cm)
- Depth: 11.00" (27.5cm) behind panel including connectors

Weight

IFD540
- 8.50 lbs (3.79kg) including tray & connectors

IFD440
- 6.60 lbs (2.99kg) including tray & connectors

VHF COM Power Output
- 10 Watts nominal
- Optional 16Watt (for 28vdc installations only)

Power Requirements
- 11 - 33VDC
- 4.4A/6.5A Xmit @14vdc
- 2.2A/4.0A Xmit @28vdc

Environmental
- DO 160E
- To 50,000 ft.
- -20C to +55C Operating
- +70C Short Term

Functionality

Satellite Datalink Weather Interface
- Avidyne MLB700/WSI AV-300 Broadcast Datalink Receiver
  – *Using WSI InFlight® Aviation Weather & SIRIUS® Satellite Radio*

Electronic Approach Charts & Airport Diagrams
- CMax™ – Jeppesen Electronic Airway Manual Charts (IFD540 only)

Lightning Interface
- Avidyne TWX670 Tactical Lightning Detection
- L3 WX-500 Stormscope® Weather Mapping Sensor

Traffic Interface
- Avidyne TAS600/605/610/615/620/A TAS
- Ryan 9900B/BX TAS
- Honeywell KTA870/KMH880 TAS/IHAS
- L3 Skywatch 497 / HP TAS
- Garmin GTS800/820 TAS
- Honeywell CAS66A TCAS I
- L3 791 TCAS I
- Garmin GTS850 TCAS I

ADS-B Interface
- Avidyne TAS605A/TAS615A/ TAS620A (Traffic)
- Capstone Interface (future release)

Terrain Awareness
- Color-Contoured Terrain Base Map Built in
- Americas Terrain & US Obstacle Data
- International Terrain Data – optional

406 ELT Interface
- Aviation RS-232
- NMEA 0183

Charts, Nav Data, and other software updates are easily field loadable via USB.

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