AVIDYNE® IFD545/510
FMS/GPS

Avidyne IFD5-Series FMS/GPS/NAV/COM sets a new standard for integration in rotorcraft category navigation systems. Designed for the rigorous demands of corporate, military and special-mission helicopters, the IFD5-Series flight management system provides full Required Navigation Performance (RNP) and AreaNavigation (RNAV) capability, including Localizer Performance with Vertical (LPV), Lateral Navigation/ Vertical Navigation (LNAV/VNAV), LNAV-Only, and Approach Procedures with Vertical (APV) approach modes.

- **Hybrid touchscreen with traditional knobs and buttons**
- **Moving map with extensive airspace, terrain, navaid, and airport display capability**
- **Display of XM or ADS-B weather with full graphics as an overlay on the map**
- **Traffic display from TCAS, TAS, or ADS-B**
- **Geo-referenced Jeppesen® Approach Plates and Airport Diagrams, including Heliports**
- **WiFi Integration with ForeFlight® and a host of other EFBs**
- **Class B NVIS compatibility available in compliance with RTCA/DO-275, MIL-L-85762A, and MIL-STD-3009 as required**
- **Optional RS-170 video display**
- **Optional integrated H-TAWS**
- **Optional radar display**

AVIDYNE®

Avidyne IFD545/510: Engineered for Real World Flying

Avidyne IFD5-Series incorporates significant technology advancements over anything else currently available. From its hybrid touchscreen with knobs and buttons and "Page & Tab" user interface, flight planning has never been easier. Its shallow menu structure gives pilots access to any screen in the system in only one or two button pushes, dramatically reducing head down time. Unlike most traditional GPS navigators, Avidyne's IFD5-Series provides a large, full-color moving map display with pilot-selectable overlays of NAVAIDS, Intersections, Airways plus ADS-B or on-board weather and traffic

- **Hybrid Touch with knobs and buttons (flight glove compatible)**
- **"Page & Tab" user interface**
- **Fuel range ring reserve set for 20min**
- **Full color moving map**
- **NVG compatible**

IFD545

Wireless Connectivity

All Avidyne IFD5-Series systems include integrated WiFi and Bluetooth® connectivity. Numerous tablet application developers support the Avidyne IFD5-Series wireless protocol. Foreflight® and many other apps are capable of receiving GPS position, ADS-B weather and traffic, XM Weather, and other data from the IFD5-Series system. Integrated wireless connectivity allows pilots to transfer flight plans from tablet Apps including ForeFlight®. Imagine being able to plan a flight, file a flight plan, get a clearance, and transfer the flight plan to your FMS, seamlessly. And all IFD5-Series systems have a built-in USB charger so you can insure your devices have adequate battery levels.

- **Integrated WiFi/Bluetooth® connectivity**
- **Supports numerous tablet applications**
- **Built in USB charger**

3D Terrain & FLTA

Terrain Awareness (SVS-TA) is provided via hashed coloration of terrain. Textual and aural alerts are provided for terrain hazards. Forward Looking Terrain Alerting (FLTA) displays an impactpoint based on projected flight path. FLTA also provides visual CAS messaging & aural alerting.

- **Actively projects the aircraft's flight track in time to determine imminent collisions**
- **Caution alerts for projected collisons within 60 seconds**
- **Warning Alert for terrain projected with 30 seconds**
- **Color-contoured terrain base map for easy pilot recognition**

Electronic Approach Charts & Airport Diagrams

Avidyne IFD5-Series' innovative implementation of Jeppesen's® chart services displays electronic terminal and approach charts and airport diagrams and includes a geo-referenced overlay of ownship present position and current flight plan. With one-button access to the worldwide library of Jeppesen electronic charts and airport diagrams, Avidyne IFD5-Series dramatically reduces the pilot workload and enhances situational awareness. Charts databases are quickly and easily updateable via the USB port on the IFD5-Series bezel using virtually any standard USB memory stick.

- **Single button access to charts and airport diagrams**
- **Support for Helipads & Helicopter SID/STAR/Approaches**
- **Update charts and diagrams easily via USB port**
- **Reduces pilot workload**

Flight Planning Made Easy

Entering and editing Flight Plans has never been easier than with the Avidyne IFD5-Series. It features easy-to-use flight planning with easy airway navigation, Avidyne's exclusive GeoFill™ waypoint nomination, and full autopilot integration.

Easy clearance-language flight plan entry, including SIDS and STARS, Procedure Previews, one-touch Holds, and rubberband flight plan editing, reduce workload and heads-down time. Avidyne IFD5-Series can store up to 99 flight plans of 128 waypoints each for quick access, and up to 1,0000 LAT/LON and Rho/Theta-defined User Waypoints.

Its cross-fill capability seamlessly automates the process of synchronizing flight plans in dual-FMS installations.

IFD510

- **Easy airway navigation**
- **Avidyne's GeoFill® waypoint nomination**
- **Store up to 99 flight plans and 128 waypoints for quick access**

WX Radar

Optional interface for BendixKing RDR2000-series digital radar systems, including support for Vertical Profile™, and can replace legacy radar indicators or act as a repeater display with certain EFIS systems for added redundancy.
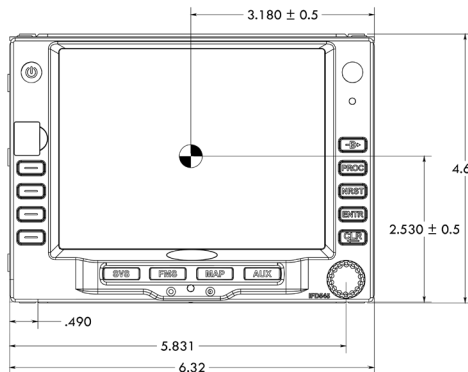
Video

Options include the ability to display RS-170 video using any compatible camera or video source.

/WIDYNE®

Specifications

Display(IFD550/545/540/510)
- 5.7" Diagonal w/ touchscreen
- Full VGA - 640x480 pixels
- 65,535 colors
- Ultrabright sunlight readable w/ LED backlighting

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

Weight
- IFD550 - 9.19 lb (4.17 kg)
- IFD540 - 8.79 lb (3.99 kg)
- IFD545 - 7.48 lb (3.39 kg)
- IFD510 - 7.13 lb (3.23 kg)

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

GPS
- 16-Channel GPS/SBAS Receivers
- RTCA DO-178B and DO-254 Level B,
- RTCA DO-160E
- Meets DO-229D, Beta Class 3
- Accuracy:
  - Autonomous Position
    - 3 meters (CEP 50%)
    - 5 meters (95%)
  - SBAS Differential Position
    - 1 meter (CEP)
    - 3 meters (95%)
  - Velocity Accuracy 0.1 knots (95%)
- Dynamics:
  - Acceleration : 10g max
  - Speed : 1,000 knots
  - Altitude : 50,000 ft

Warranty
- 2 or 4 year warranty
- AeroPlan™ extended warranty available

I/O
See website for complete list of Interfaces. www.avidyne.com
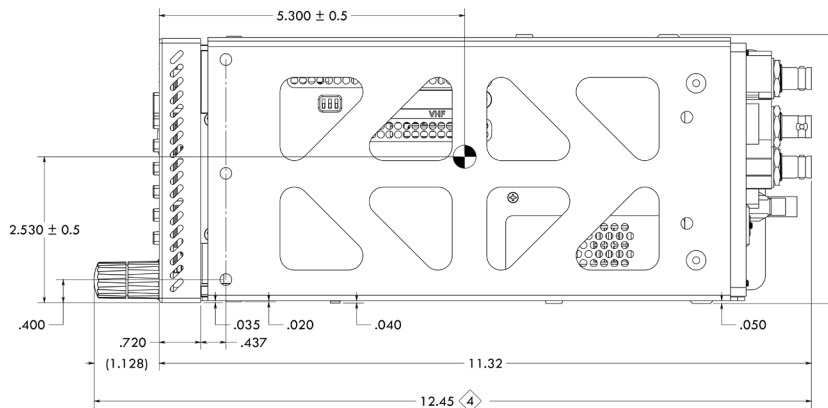
Power Requirements
- 10 Watts nominal
- Optional 16Watt (for 28vdc installations only)

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

Cooling
- Built in cooling
- External cooling provision available

AVIDYNE®
Avidyne Corporation
710 North Drive
Melbourne, FL 32934

* Features and options subject to change without notice.