## QUICK REFERENCE

# IFD4XX

IFD440 FMS/GPS/NAV/COM
IFD410 FMS/GPS
IFD100 App for iPad


# Overview Diagram


**To move your cursor, either:**

1. *Turn the* 6 *FMS knob (the outer ring scrolls through each box, whereas the inner ring scrolls through the fields of each box),* ***or***
2. *Utilize hybrid touch by tapping the screen on a waypoint or in the blank space between waypoints.*

| | |
|---|---|
| 1 | Volume/Power/ Squelch Knob |
| 2 | Frequency Swap (flip-flop) |
| 3 | Line Select Keys (LSK) |
| 4 | COM/NAV* Manual Tuning Knob (Push for NAV & Transponder) |
| 5 | Page Function Keys (two-way rocker) FMS, MAP, AUX |
| 6 | FMS Knob (context-sensitive: scroll, zoom/ push to select) |
| 7 | Clear (delete) |
| 8 | Enter (select) |
| 9 | Procedure |
| 10 | Direct To |
| 11 | CDI Nav Source |
| 12 | Active Waypoint |
| 13 | Standby Frequency* |
| 14 | Active Frequency* |

**To start an FMS edit, either:**

***1.*** *Press the* 8 *ENTR function key,*

***2.*** *Push the* 6 *bottom right knob,* ***or***

***3.*** *Tap the screen in the same field twice.*

*** Applies to IFD440 only.**

# FMS Flight Plan Introduction FPL TAB



## 1

**Following power-on, the first time the "FPL" tab of the FMS page is accessed,** an empty flight plan page is presented with the origin waypoint pre-populated.


## 2

**We recommend to tap the "Map" side tab** to view the moving Map display while entering your flight plan.

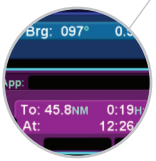

## 3

**The origin will be the closest airport to the current GPS position,** or the airport from the previous power down if GPS position has not locked on yet.

**This FMS uses a database of published airways to quickly build long flight plans.** *Here's how: When a flight plan waypoint is a valid airway entry point, a dropdown list of available airways appears. Scroll to the desired exit point, and all intermediate intersections along that airway are automatically populated into the flight plan.*

# Inserting a Waypoint

FPL TAB


1

**To add a waypoint to your flightplan,** tap the empty space where your cursor is below 'Origin.' The IFD will present a new waypoint with a suggested identifier (powered by Geofill™).

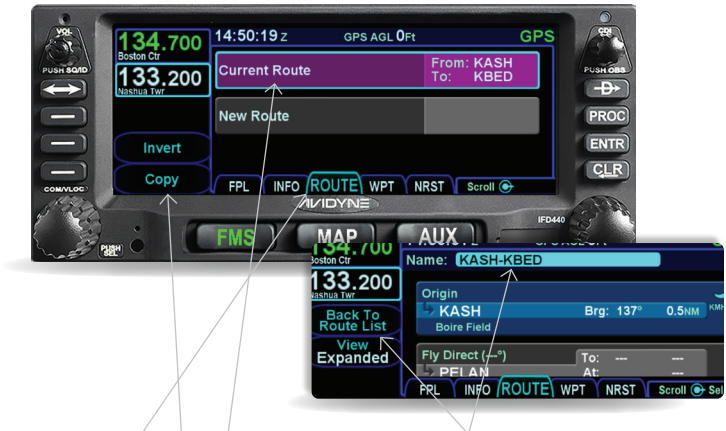

2

**Use the right knobs or tap** the identifier to display the QWERTY keyboard in order to enter the waypoint identifier.


3

**Push the right knob, press ENTR,** or tap the ENTR key on the QWERTY keyboard to enter the new waypoint into the flight plan.

# Saving the Flight Plan ROUTE TAB





1

**Once you have entered a Flight Plan** that you would like to save for future use go to the route tab on the FMS page.


2

**Highlight current route** then select Copy in the bottom left of the screen.

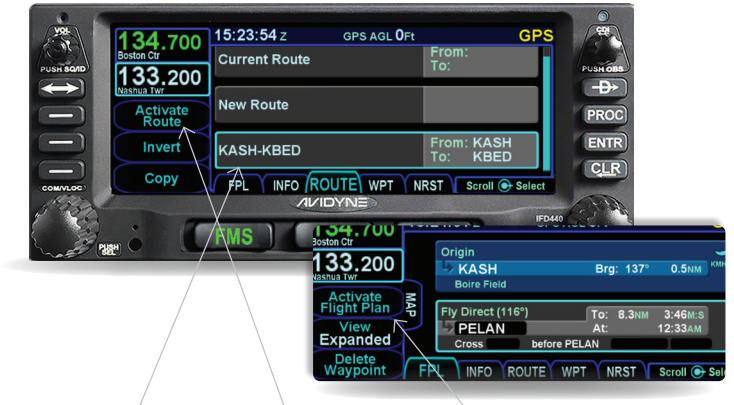

3

**You have now saved the Flight Plan** as a route for future use. (You can also cusomize the name of the route here).


4

**Select 'Back to Route List.'** The route will now be one of your saved route selections.

# Activate a Stored Route ROUTE TAB







1

**To activate a route from the stored routes list,** tap the desired route to select.

2

**To activate,** press the "Activate Route" LSK or touch-screen button.

3

**Then** press the "Activate Flight Plan" LSK or touch-screen button.

# Direct-To Operation FPL TAB


## 1

**Press the Direct-To button** to display a green Direct-To dialog box pre-populated with a logical waypoint (powered by Geofill™).

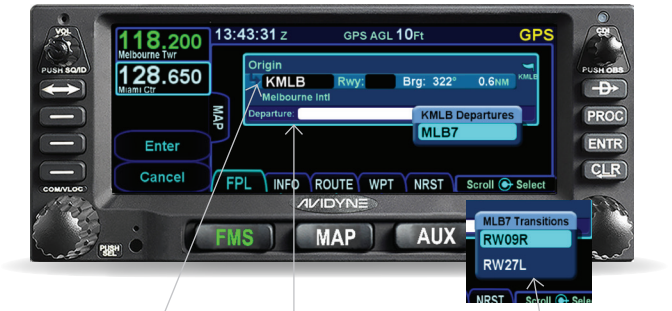

## 2

**To enter a different waypoint,** tap the data field in the top dialog box. The QWERTY keyboard appears for you to enter the desired waypoint identifier.


## 3

**To approve,** tap the 'Activate' dialog box to select. Pressing ENTR or the right knob can also be used to confirm.

# Selecting a Departure FPL TAB





1

**To begin the process of selecting a departure procedure,** tap on the Origin box to select. A 'Departure' field will appear.


2

**Tap the 'Departure' field.** A dropdown list of available departure procedures will be displayed.


3

**Select the transition (departure Runway)** and push ENTR.

# Selecting an Approach FPL TAB



1

**To display the Approach field of the next destination,** press the **"PROC"** Function key.* This will display a dropdown list of available published approaches.


2

**To select the desired Approach,** twist the FMS knob to scroll, then push to select, or tap the highlighted selection.


3

**To select the Transition,** twist the FMS knob to scroll, then push to select, or tap the highlighted selection.

***Pressing the "PROC" Function key a second time** *will move the cursor over the Arrival field and present a drop down list of available published arrivals. Each subsequent press of the "PROC" key will step through all following destination airfield approaches/arrivals in the flight plan, and wrap back around to the origin. When the drop down box appears over the intended data field, tap the desired procedure to add to the flight plan.*

# Selecting a Visual Approach

FPL TAB



1

**To select a Visual Approach for your destination airport ,** press the "PROC" Function key.* This will display a dropdown list of available published approaches.


2

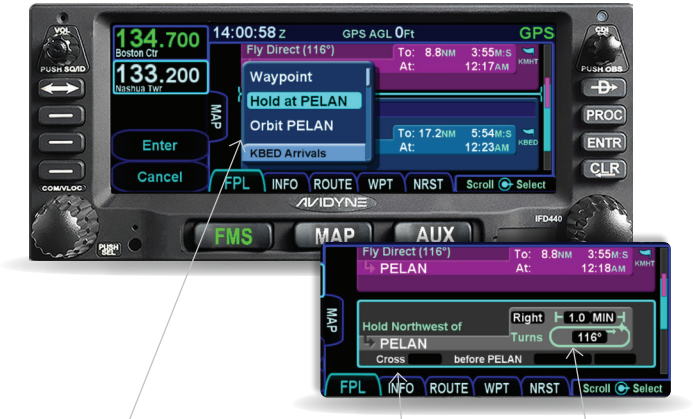
**To select the desired Visual Approach,** twist the FMS knob to scroll down past any published IFR approaches to see the available Visual Approaches, then push to select, or tap the highlighted selection.


3

**Then select the Visual Entry,** (Straight In, Left Base, Right Base, Left Downwind, Right Downwind) that works best for your direction of flight and approach angle.

**Go to Aux->Setup->FMS->Visual Approach Settings** *to set the desired Glideslope Angle. The default setting is 4° but it can be set to any angle between 1° and 6° in 0.1° increments. Glideslope must be set to desired angle BEFORE loading the Visual Approach. Remember you are still flying a VFR approach and proper clearance and separation must be observed for the terrain in the area.*

# Entering a Hold FPL TAB





**To enter a hold,** tap below the waypoint of interest to display a drop down list of options.

2


**S**elect "Hold at <waypoint name>" and push the FMS knob to select.

3


**A Hold Waypoint is added to the flight plan,** populated with either standard or published hold data.

4


**To edit the hold**, hide the map, then touch the field to be edited (turn direction, leg length, inbound course).

# Exiting/Deleting a Hold

FPL TAB



1

**To Exit the hold,** select the "Exit Hold" Line Select Key (LSK1), and the FMS will exit the hold the next time it passes the hold fix.


2

**A blue CAS message** will alert you that you are 'Exiting hold at Fix' on your next pass.


3

**Should you need to continue to Hold,** select "Continue Hold" using Line Select Key (LSK1).


4

**Other options** include deleting the Hold Waypoint with CLR button, or you can highlight a downstream waypoint in the flightplan and select 'Activate Leg' (LSK3).

# Changing Map View MAP TAB:


**To change Map View (orientation),** push the small right knob, which will cycle the Map between three different views:

North Up (360°) -> Track Up (240° arc view) -> Track Up (360°)

**If a Heading source is connected to the IFD, then you can set preference for Heading Up rather than Track Up in AUX->SETUP page under Map Orientation.*

# Decluttering the Map MAP TAB:


**To select the preferred level of map density displayed,** from the Map Page, Map tab, press the “Land” LSK to declutter the terrain base map and/or “Nav” LSK to declutter off-route NavAids (Intersections, Airports, VORs etc). There are four levels of declutter for each. The specified level of detail will remain consistent across all map pages. (Terrain Awareness alerts and nearby Traffic are not affected by declutter settings.)

**For Tech Support and Training information, see back cover.**

# TAWS/Synthetic Vision

TAWS TAB:





**Select the TAWS Tab on the MAP page of the IFD5XX to view 3D Exocentric Synthetic Vision,** which includes 3D Terrain, Obstacles, Traffic (when available), Airports.

Turning the bottom right knob or pinch zooming the display will adjust the perceived distance above and behind the ownship symbol.

**Press the FPL button (LSK3)** to turn off the Magenta Line and just have the shadow (which represents aircraft position over the ground), or push again to remove both. (On the TAWS page, the Magenta line will not appear unless your aircraft is 1,000 ft AGL or greater, and will disappear as you descend below 1,000ft.

**When TAWS button (LSK2) is ON**, the full TAWS-B capability is enabled, including:
- FLTA Altitude Callouts
- Premature Descent Alerts
- Excessive Descent Rate
- Negative Climb Rate

**When TAWS button (LSK2) is OFF**, FLTA, and PDA are disabled, but EDR and NCR remain enabled.

# COM Radio Tuning

**Applies to IFD440 only.**

Radio Tuning can be accomplished through 3 different methods.


1

**Twist the COM/NAV knob to direct-tune.** Use the inner knob for KHz and the outer knob to adjust MHz.


2

**Notice that twisting the COM/NAV knob** also brings up the FREQ nomination list. Double click on the assigned frequency to transfer to STBY.


3

**Touch the standby frequency field** to display the numeric keypad. Then enter the desired frequency.

4

**Activate the frequency.** Once the desired frequency has been tuned in to the standby, press the flip-flop button to make it the active frequency.

**The Emergency COM Frequency, 121.5 kHz,** can be quickly tuned into the Active com slot by pressing and holding flip-flop button for approximately three (3) seconds.

# NAV Tuning

**Applies to IFD440 only.**

Nav radio tuning can be accomplished through 3 different methods.


1

**Use the COM/NAV knob.** Push the knob to display NAV frequencies. Then, twist the inner knob to direct-tune got KHz and the outer knob to adjust MHz.


2

**Touch the standby frequency field to display the numeric keypad.** Enter the desired frequency.


3

**Touch the standby frequency, then "ABC..." to display the QWERTY keyboard.** Type the identifier of the VOR (powered by GeoFill™).

4

**Activate the frequency.** Once the desired frequency has been tuned in to the standby, press the flip-flop button to make it the active frequency.

# Updating Databases


## 1

**Insert Jump Drive in USB Port, then power up.** Jump drive must be formatted to FAT32 and should have your appropriate databases loaded already.

## 2

**Use right knob to select Data file to be transferred to IFD.** Twist the FMS knob to highlight, then push to select each data type. A green Check Mark will appear by each. highlighted selection.

## 3

**Press PROCEED line select key (LSK)**. Press DONE button on screen when complete, and IFD will restart in normal “Flight Mode.”

**You will notice that this operation puts the IFD into Maintenance Mode. You can also download Maintenance Logs from this page, pair your BT keyboard and more. Please use caution so as not to change port settings, For Tech Support and Training information, see back cover.**

# Connecting iPad to IFD via WiFi



1

**From AUX->SETUP page, double touch or highlight and push right knob to expand the +Connectivity menu.** Set IFD WiFi to 'ON' using touchscreen or by turning inner right knob.

2

**Go to Settings Menu on iPad** and select WiFi that matches your IFD's Network name. Enter Password shown under +Network menu. Then launch IFD100 App so that IFD sees that you are trying to gain permission to connect.


3

**Under +Devices menu,** locate your iPad by name and change "Blocked" to "Always" if you want it to auto-connect on all subsequent flights. (you can also 'Block' unwanted iPad connections).

# Using IFD100 iPad App


**It is important to note the NAV databases of your IFD5XX and your IFD100 App must match,** in that they must be the same cycle (have the same expiration date). If you are not seeing a Flightplan on your IFD100 after launch and you know your WiFi connection is good, it's most likely that these do not match. You can verify database expiration dates by going to Go to AUX->SETUP and 'Status - Databases' page (LSK2).

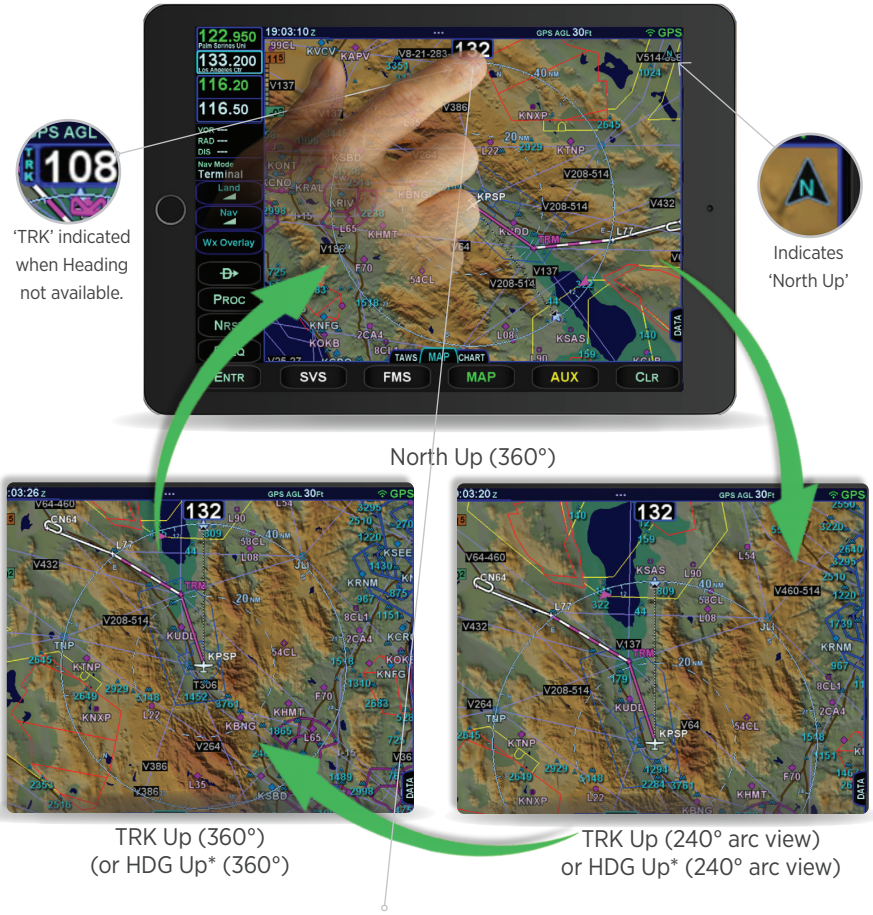
# IFD100 - Page & Tab




**Select different screens on the IFD100 in much the same way as with the panel mounted IFD5XX.** Page buttons on the IFD100 operate much the same as the IFD5XX. Touching any of the available Tabs will switch the display accordingly. Or you may access push the left or right side of the Page button on the IFD100 to sequence left or right through the available Tabs, acting just like the two-way rocker switches on the IFD5XX. Activate the Side Tab on the IFD100 just as you would on the IFD5XX--either by touching it directly, or by touching andholding the highlighted Page button.

# IFD100 - Changing Map View

MAP TAB:




**You can change Map View of IFD100 (orientation)** by touching the HDG box on the MAP page, which will cycle the Map between three different views:

North Up (360°) -> Track Up (240° arc view) -> Track Up (360°)

**If a Heading source is connected to the IFD5XX, then you can set preference for Heading Up rather than Track Up in AUX->SETUP page under Map Orientation.*

# IFD100 - Synthetic Vision


**Select the TAWS Tab on the MAP page of the IFD100 to view 3D Exocentric Synthetic Vision,** which includes 3D Terrain, Obstacles, Traffic (when available), Airports.

The Terrain Awareness and Alerting feature shows nearby terrain within 1,000 feet as yellow hashed pattern, and terrain within 100 feet or above in red hashed pattern.

Pinch zooming the display will adjust the perceived distance above and behind the ownship symbol.

# IFD100 - Portrait Mode


**Rotate your iPad for Portrait display** of all the same screens as in landscape mode, but with better vertical map distance.

# IFD100 - MultiTasking

**Multitasking -** allows you to view two Apps at the same time on single iPad. In this example, we will launch Foreflight and then add IFD100.



1

**Launch Foreflight App.**

2

**Touch 3 dots in top-middle of screen then select Split Screen** (Middle icon).


3

**Launch IFD 100-** You will be prompted to select another App. This is where you launch the IFD100 App. Both apps will now be running.

# NOTES

**PILOT SUPPORT**

888.723.7592

*Mon-Fri: 8:00AM–5:00PM EDT / 1200-2100 UTC*

**visit: techsupport.avidyne.com**

**email: pilotsupport@avidyne.com**

**AFTER HOURS TECHLINE™**

877.900.4264

**PILOT TRAINING**

**avidynetraining.com**

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