

FlyQ EFB supports a large and growing number of connections to external devices. In addition to more than 20 ADS-B systems (see *Supported ADS-B Systems* earlier in this document) FlyQ EFB connects to various in-panel systems, GPS systems, and flight simulators.

Dynon SkyView and AFS AF-5xxx Series

With the addition of an inexpensive Wi-Fi adapter, your SkyView and AFS system can send GPS, AHRS, and ADS-B information to FlyQ EFB as well as bi-directionally exchange flight plans. Contact Dynon or AFS to purchase the Wi-Fi adapter.

Connecting FlyQ to SkyView or AFS

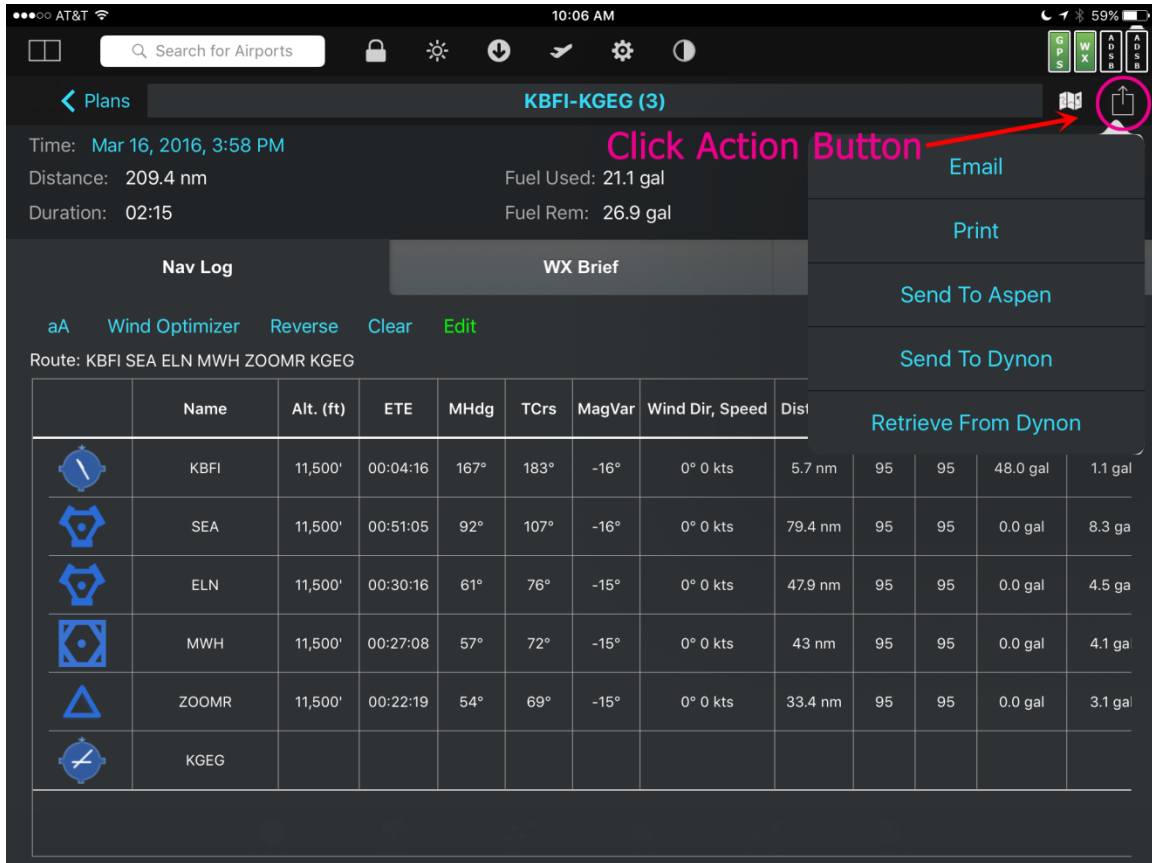
The in-panel system creates a Wi-Fi network when the Wi-Fi adapter is properly connected. Connect your iPad to it just as any other normal Wi-Fi network with the **Settings** app on your iPad. The name of the Wi-Fi network will include the device name.

Open FlyQ EFB once the iPad is connected to the network. Within a few seconds, you'll see a message that your device is connected to FlyQ. At that time, the GPS and AHRS data from the Dynon or AFS device will be used in FlyQ EFB. You'll also see ADS-B traffic and weather on FlyQ EFB if your SkyView is connected to an ADS-B system (SkyView software release 15 or better is required for the ADS-B data). You can see additional information about the connection by tapping the **Status** indicators at the top right corner of the screen and selected the *ADS-B* tab.

Your iPad cannot connect to the Internet via Wi-Fi when it's connected to the SkyView or AFS network. If your iPad has a cellular connection, it can still connect to the Internet from that system. However, in that case, FlyQ EFB treats the SkyView / AFS connection like an ADS-B connection and will not access the Internet in order to ensure good performance (that is, cellular connections in-flight are tenuous at best so the system works better by not trying to use them).

Note: As of this writing, FlyQ EFB will say *Dynon* even when an AFS system is connected.

Sending and Receiving Flight Plans



Go to the **Plans** tab and select the **NavLog** sub-tab. Tap the **Action** button at the upper right corner (looks like a box with an arrow coming out of it).

Tap **Send to Dynon** to push the current flight plan to Dynon SkyView or AFS.
Tap **Retrieve from Dynon** to pull the flight plan loaded on SkyView or AFS.

Note: FlyQ EFB almost always has a flight plan open. However, if one is not open, you'll need to open or create one to see the **NavLog** sub-tab.

Note: The *Dynon* choices are only shown if FlyQ is connected to SkyView or AFS.

Avidyne IFD440 and IFD540

The new Avidyne IFD440 and IFD 540 systems include an integrated WiFi adapter that works with FlyQ EFB. With IFD software version 10.2 or later, your Avidyne system can send GPS and AHRS information to FlyQ EFB as well as bi-directionally exchange flight plans. GPS data is available with IFD version 10.1.

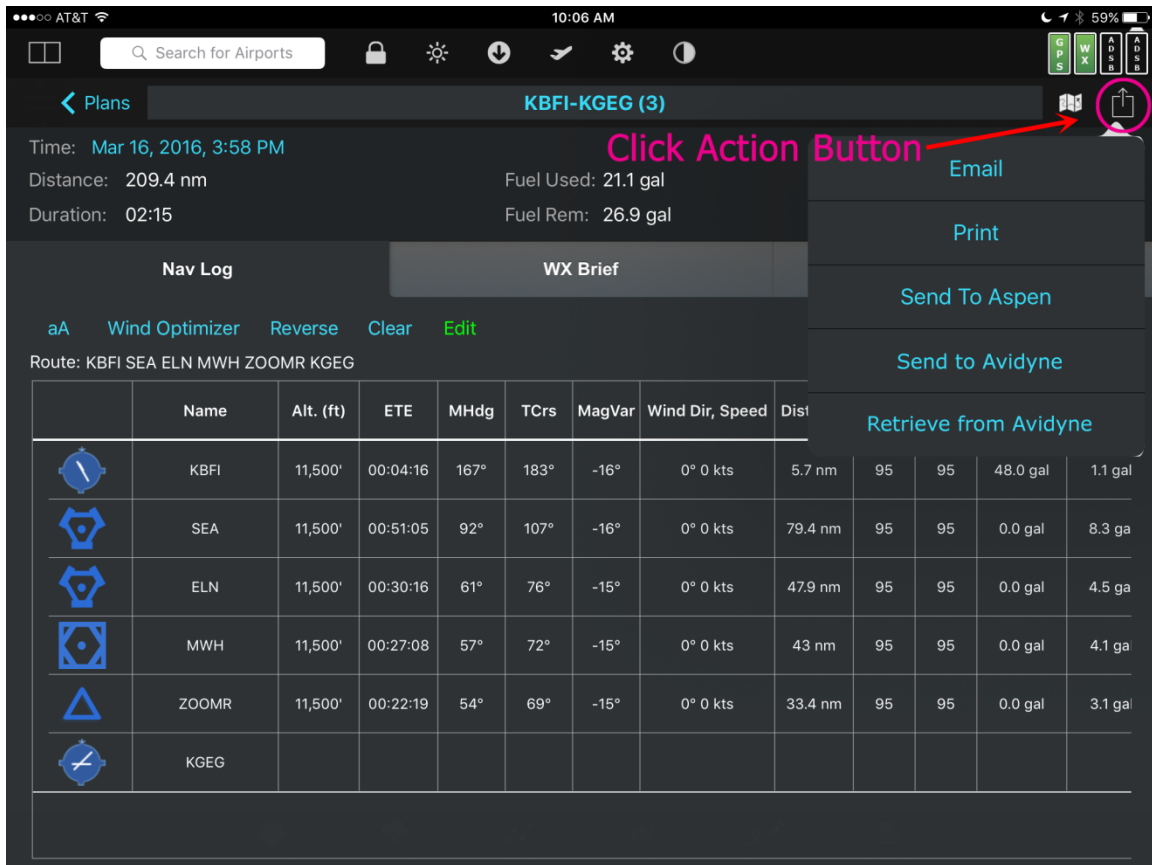
Connecting FlyQ to the IFD440 or IFD540

The in-panel system creates a Wi-Fi network. Connect your iPad to it just as any other normal Wi-Fi network with the **Settings** app on your iPad. The name of the Wi-Fi network will include the device name.

Open FlyQ EFB once the iPad is connected to the network. Within a few seconds, you'll see a message that your device is connected to FlyQ. At that time, the GPS and AHRS data from the Avidyne will be used in FlyQ EFB. You can see additional information about the connection by tapping the **Status** indicators at the top right corner of the screen and selected the *ADS-B* tab.

Your iPad cannot connect to the Internet via Wi-Fi when it's connected to the Avidyne network. If your iPad has a cellular connection, it can still connect to the Internet from that system. However, in that case, FlyQ EFB treats the Avidyne connection like an ADS-B connection and will not access the Internet in order to ensure good performance (that is, cellular connections in-flight are tenuous at best so the system works better by not trying to use them).

Sending and Receiving Flight Plans



Go to the **Plans** tab and select the **NavLog** sub-tab. Tap the **Action** button at the upper right corner (looks like a box with an arrow coming out of it).

Tap **Send to Avidyne** to push the current flight plan to the IFD440/540.

Tap **Retrieve from Avidyne** to pull the flight plan loaded on the IFD440/540.

Note: FlyQ EFB almost always has a flight plan open. However, if one is not open, you'll need to open or create one to see the **NavLog** sub-tab.

Note: The *Avidyne* choices are only shown if FlyQ is connected to an IFD440/540.

Aspen Connected Panel

The Aspen Evolution system can receive flight plans sent from FlyQ EFB with the addition of the Aspen Connected Panel. With the Connected Panel, the FlyQ EFB flight plans transfer to your system's GPS such as the Garmin 430/530.

Connecting to the Aspen Connected Panel

The Connected Panel creates a Wi-Fi network. Connect your iPad to it just as any other normal Wi-Fi network with the **Settings** app on your iPad.

Your iPad cannot connect to the Internet via Wi-Fi when it's connected to the Connected Panel network. If your iPad has a cellular connection, it can still connect to the Internet from that system. However, in that case, FlyQ EFB treats the Connected Panel connection like an ADS-B connection and will not access the Internet in order to ensure good performance (that is, cellular connections in-flight are tenuous at best so the system works better by not trying to use them).

Sending Flight Plans

	Name	Alt. (ft)	ETE	MHdg	TCrs	MagVar	Wind Dir, Speed	Dist	Retrieve From Dynon			
	KBFI	11,500'	00:04:16	167°	183°	-16°	0° 0 kts	5.7 nm	95	95	48.0 gal	1.1 gal
	SEA	11,500'	00:51:05	92°	107°	-16°	0° 0 kts	79.4 nm	95	95	0.0 gal	8.3 ga
	ELN	11,500'	00:30:16	61°	76°	-15°	0° 0 kts	47.9 nm	95	95	0.0 gal	4.5 ga
	MWH	11,500'	00:27:08	57°	72°	-15°	0° 0 kts	43 nm	95	95	0.0 gal	4.1 gal
	ZOOMR	11,500'	00:22:19	54°	69°	-15°	0° 0 kts	33.4 nm	95	95	0.0 gal	3.1 gal
	KGEG											

Go to the **Plans** tab and select the **NavLog** sub-tab. Tap the **Action** button at the upper right corner (looks like a box with an arrow coming out of it). Tap **Send to Aspen** to push the current flight plan to Connected Panel.

X-Plane Flight Simulator

FlyQ EFB supports X-Plane version 10.2 or higher. To set it up:

1. Ensure you're using the latest version of X-Plane (10.2 or greater required).
2. Make sure your iPad and the computer running X-Plane are on the same Wi-Fi network.
3. You'll need to tell X-Plane what the IP address of your iPad is. To do that:
 - A. Tap the **Settings** app on your iPad (usually on the home screen).
 - B. Tap **Wi-Fi**.
 - C. Look for the Wi-Fi network with a checkmark next to it and tap it to see more details. **Note:** If no network has a checkmark, you cannot connect X-Plane and FlyQ EFB.
 - D. Write down the value you see in the **IP Address** field.
4. Launch X-Plane on your computer.
5. Select **Settings** then click **Net connections** and **iPhone/iPad**.
6. Check the box for **Send AHRS and ADS-B data to Xavion or FlyQ**.
Important! If you see a Xavion option without FlyQ, use the Xavion option instead of the FlyQ option as there was a labeling error in earlier versions of X-Plane.
7. Enter your iPad's IP address in the text field next to **Send AHRS and ADS-B data to Xavion**. The field probably has a value like *192.168.0.1* by default. That value will not generally work and needs to be replaced by the actual IP address of your iPad. Leave the *48002* value unchanged.
8. Click the **X** in the corner of the **Net Connections** window to return to X-Plane.
9. Open FlyQ EFB.
10. Within a few seconds, FlyQ EFB will inform you that it's connected to X-Plane.

Microsoft Flight Simulator / Prepar3D

FlyQ EFB will automatically recognize Microsoft Flight Simulator or Prepar3D when you use the FSXFlight plugin. See <http://www.fsxflight.com/> for more info.

When connected, FlyQ EFB will use the GPS, AHRS, and traffic info (if any) sent from the simulator.

Other Simulators

In general, any simulator that works with other iPad apps should automatically work with FlyQ EFB. In some cases, you may need to use the settings marked for ForeFlight or WingX.

GPS

FlyQ EFB automatically uses any external GPS connected to your iPad. Apple must approve external Bluetooth GPS devices so not all work with the iPad. The most commonly used approved devices are the Dual XGPS150/160, the Bad Elf, and the Garmin GLO. They are all about \$100 and all work well with FlyQ EFB. And they all work *much* better than the iPad's internal GPS. If you choose not to use an ADS-B receiver (almost all of which include a WAAS GPS), we very strongly suggest using an external GPS.

External GPS devices connect to the iPad at the operating system level, not directly to FlyQ EFB. The operating system sends the location information to FlyQ EFB and any other app that requests it. Therefore, it is critical that **Location Services** is turned on in the iPad's **Settings** and that **Location Services** is specifically allowed for FlyQ EFB.

- Open the **Settings** app on your iPad
- Select **Privacy** on the left side panel
- Ensure that **Location Service** is *ON*
- Tap **Location Services** and look for *FlyQ EFB*
- Ensure that FlyQ EFB is set to *While Using*

FlyQ EFB will display the source of the GPS connection when you tap the **Status** icons at the upper left corner of the screen. However, since the operating system is supplying the GPS location to FlyQ EFB, the app will show *iPad* as the data source. This cannot be helped because the iPad does not specify what the source of location is.

Note: Some GPS devices have a utility app. Please do not open them while FlyQ EFB is running as they tend to “grab” the GPS feed and prevent FlyQ EFB from working properly. This is especially true with the Dual app.

AHRS

Many ADS-B systems include an AHRS (source for yaw, pitch, and roll information) that is very useful when using FlyQ's synthetic vision. These include the iLevel devices, Dual XPS190, Clarity, Stratus 2, and SkyRadar DX. FlyQ EFB automatically uses the AHRS feed from these devices when they're connected and you do not need to do anything additional.

FlyQ EFB also supports two standalone AHRS units: the Level miniG and the Dynon D2. To use these units:

- Turn the device on and allow it to “warm up” for a minute or so.
- Connect your iPad's Wi-Fi source to the network generated by the device.
- Open FlyQ EFB.
- In FlyQ EFB, go to **Settings** and look in the **Device** section.
- Switch **Level AHRS / Dynon D2 AHRS** to *ON*