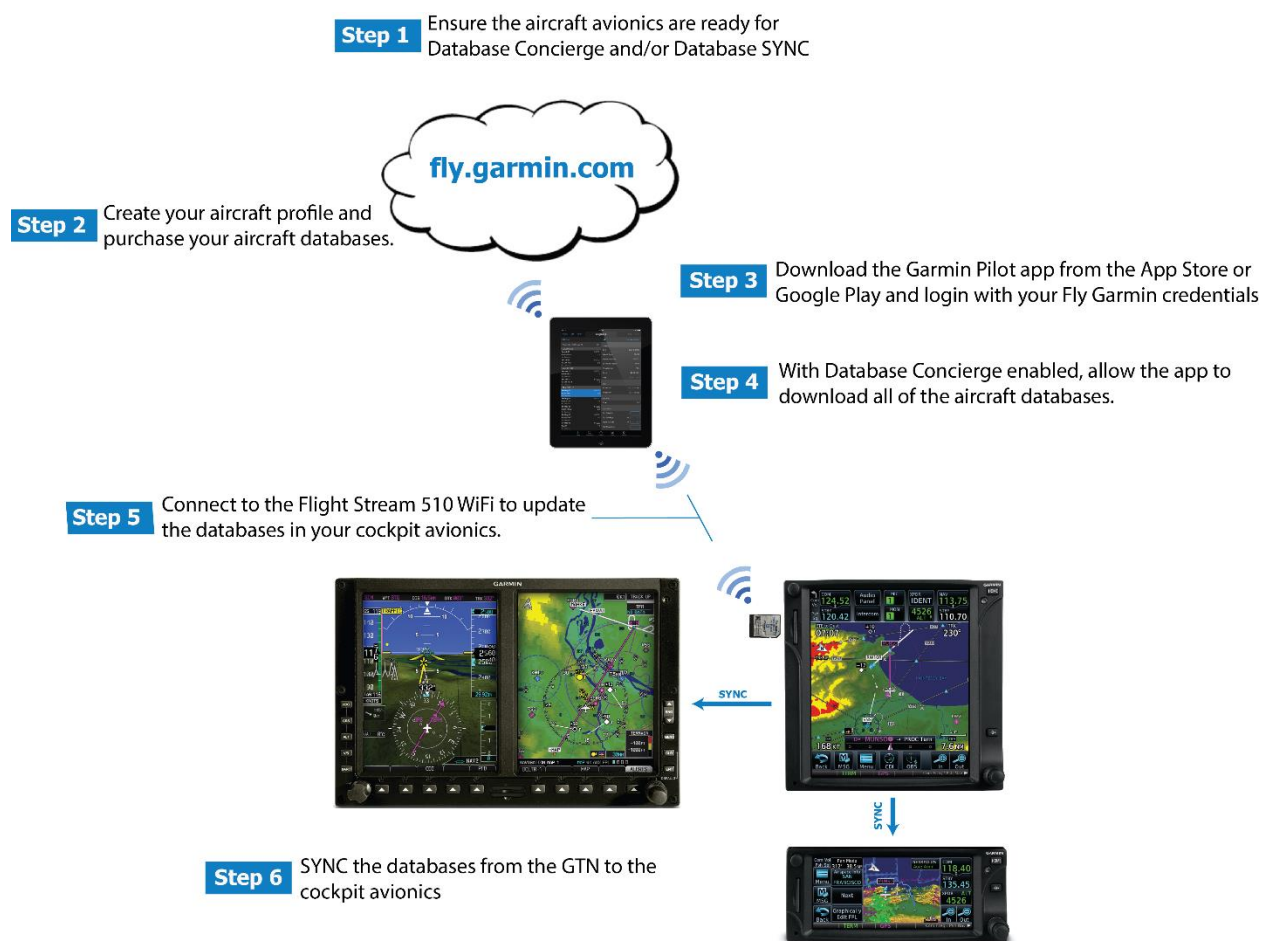# GTN DATABASE UPDATE GUIDE

FLIGHT STREAM 510, DATABASE CONCIERGE, AND DATABASE SYNC

Databases in the GTN can be updated by using Database Concierge with a Flight Stream 510 or by using a data card with a computer. The initial database installation needs to only occur on one GTN; the Database SYNC feature in the avionics will automatically distribute the databases to other Garmin cockpit displays and navigators.

This guide will help you get ready to update your GTN using the Flight Stream 510 or a data card and walk you through the process of updating your databases.

UPDATING YOUR AVIONICS DATABASES VIA DATABASE CONCIERGE

Step 1 Ensure the aircraft avionics are ready for Database Concierge and/or Database SYNC

fly.garmin.com

Step 2 Create your aircraft profile and purchase your aircraft databases.

Step 3 Download the Garmin Pilot app from the App Store or Google Play and login with your Fly Garmin credentials

Step 4 With Database Concierge enabled, allow the app to download all of the aircraft databases.

Step 5 Connect to the Flight Stream 510 WiFi to update the databases in your cockpit avionics.

SYNC

Step 6 SYNC the databases from the GTN to the cockpit avionics

SYNC

Database Concierge allows databases for a GTN navigator to be updated wirelessly from a mobile phone or tablet using Wi-Fi built into the Flight Stream 510. Once the databases have been received by the GTN they will be sent to other connected GTNs and G500/G600 displays using the Database Sync function. Using Database Concierge requires several components to be set up and configured. Once configured properly, new database updates can be

installed up to a week prior to the new database cycle. Upcoming databases will then be distributed to the cockpit avionics while you fly and are readily available upon their effective date.

INITIAL ACCOUNT AND AIRCRAFT SETUP

Prior to utilizing Database Concierge and/or Database SYNC, you'll need to ensure the aircraft avionics are installed and ready and your flyGarmin account is setup properly for database operations.
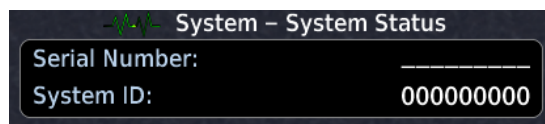
STEP 1: GET YOUR AIRCRAFT READY

- ☐ Visit your local Garmin dealer to have the software in the avionics updated and the Flight Stream 510 installed. The following avionics software is required for Database SYNC functionality:
  - The GTN requires software version 6.21 or later
  - The G500/600 requires software version 7.12 or later
  - The Flight Stream 510 requires software version 2.10 or later.

The dealer will need to enable Database SYNC on the GTN and G500/600.

- ☐ Ensure that the Database SYNC and Chart Streaming features are enabled on the G500/600 and GTNs. These should be enabled on all displays in order to take advantage of the SYNC functionality. On the G500/600, the features can be enabled on the first page of the AUX group in the SYNCRONIZATION area. In the GTN, the features can be enabled on the System Status Menu in the System - System Status pages.

STEP 2: FLY.GARMIN.COM

- ☐ **Login to your flyGarmin account** – Go to https://fly.garmin.com and use your existing account or create one if you have not done so previously. The username and password you use in this step will also be used in the Garmin Pilot app.
- ☐ **Add your aircraft and avionics to flyGarmin** – Collect the System IDs from each of the G500/600 displays and GTN navigators in your cockpit. Once logged in, add your aircraft to your profile then add your avionics information to the aircraft details. On the GTN, the System ID can be found on the *System Status* page. On the G500/600, it can be found at the bottom of the *System Status* page of the AUX page group.

- ☐ **Purchase databases for your avionics** – For the best experience, purchase a OnePak or PilotPak. These database packs include databases updates for a year for all Garmin displays in the cockpit. *Only databases purchased on https://fly.Garmin.com are compatible with Database Concierge and/or Database SYNC.*

STEP 3: GARMIN PILOT APP

- ☐ **Download the Garmin Pilot application** – Garmin Pilot is used to download and transfer databases to the Flight Stream 510. Garmin Pilot is available on iOS (app version 8.4.4 or later is required) and Android (app version 5.4.0 or later is required). Sign into Garmin Pilot using the same username and password used to purchase databases on flyGarmin (from Step 2 above).
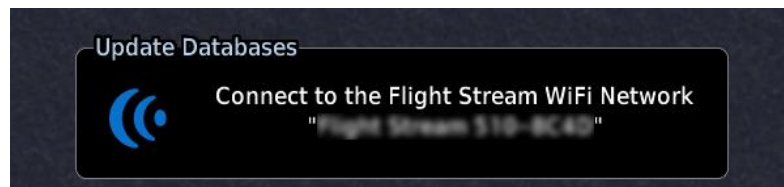
☐ **Activate a Garmin Pilot subscription** – A standard Garmin Pilot subscription is required to use Database Concierge with a Flight Stream 510. The Flight Stream 510 comes with a free 12-month subscription. Garmin Pilot subscriptions can be activated and purchased on flyGarmin.

☐ **Enable Database Concierge in Garmin Pilot** – Open the Garmin Pilot application and press the "Home" button then select the *Connext* page. Select the *Database Concierge* tab in the left column and then press "Enable Database Concierge". For the best experience, leave the Auto-Download and Auto-Delete settings enabled. With these settings enabled, your portable device will always have the latest databases downloaded, ready to install into your aircraft.

STEP 4: DOWNLOAD THE DATABASES

☐ **Download databases to Garmin Pilot** – With your portable device connected to the internet, available databases should begin downloading automatically while Garmin Pilot is open. To manage the database downloads, press the "Go to Downloads" button on the *Database Concierge* page. When all of the databases are downloaded, the app is ready to transfer them to the GTN.

STEP 5: TRANSFERRING DATABASES TO THE FLIGHT STREAM 510

☐ **Connect to Flight Stream 510 Wi-Fi network** – Once the GTN is powered on, the Flight Stream 510 Wi-Fi network will be activated while the GTN is displaying the *Database Concierge* page. Follow the instructions on the GTN for connecting your portable device to the Flight Stream Wi-Fi network.

☐ **Transfer databases** – If there are databases on your portable device that are usable on the cockpit displays, the GTN will display a list of databases to transfer. Select the desired databases for transfer and press "Start" to begin the transfer. The Terrain and Charts databases can take up to 5 minutes each to transfer. All other databases should transfer within one minute. When the database transfer is complete, the Flight Stream Wi-Fi network will be turned off automatically and the GTN will install the databases it just received.

STEP 6: SYNCING DATABASES BETWEEN COCKPIT DISPLAYS

☐ See the "FINAL STEP: SYNCING DATABASES BETWEEN COCKPIT DISPLAYS" section below

UPDATING YOUR GTN USING A DATA CARD AND PC

Step 1 Ensure the aircraft avionics are ready for
Database Concierge and/or Database SYNC

fly.garmin.com

Step 2 Create your aircraft profile and
purchase your aircraft databases.

Step 3 From the flyGarmin website, program the databases
to the SD card installed in the SD card reader of a PC.

Step 4 Install the SD card into the GTN SD card slot.

SYNC

SYNC

Step 5 SYNC the databases from the GTN to the
cockpit avionics

The GTN can be updated using an SD card or a Flight Stream 510 connected to a PC instead of using a mobile device. The process for setting up your flyGarmin account is the same as with Database Concierge. With an internet connection and access to flyGarmin you will download the databases directly to the SD card or Flight Stream 510 via a PC.

When it's time to update the databases, take the data card that came with your Garmin display or the Flight Stream 510 to a computer. To program the Flight Stream 510 with a PC, you must use the card reader that is included in the Flight Stream 510 kit (Garmin P/N 013-00203-03). A Windows-based computer must be used to download the databases. Support for other operating systems will be added in a future release.

INITIAL ACCOUNT AND AIRCRAFT SETUP

Prior to utilizing Database Concierge and/or Database SYNC, you'll need to ensure the aircraft avionics are installed and ready and your flyGarmin account is setup properly for database operations.
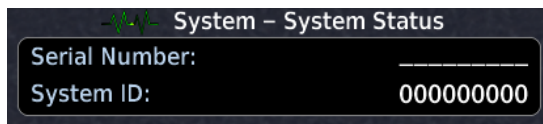
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The dealer will need to enable Database SYNC on the GTN and G500/600.

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STEP 2: FLY.GARMIN.COM

☐ **Login to your flyGarmin account** – Go to https://fly.garmin.com and use your existing account or create one if you have not done so previously. The username and password you use in this step will also be used in the Garmin Pilot app.

☐ **Add your aircraft and avionics to flyGarmin** – Collect the System IDs from each of the G500/600 displays and GTN navigators in your cockpit. Once logged in, add your aircraft to your profile then add your avionics information to the aircraft details. On the GTN, the System ID can be found on the *System Status* page. On the G500/600, it can be found at the bottom of the *System Status* page of the AUX page group.

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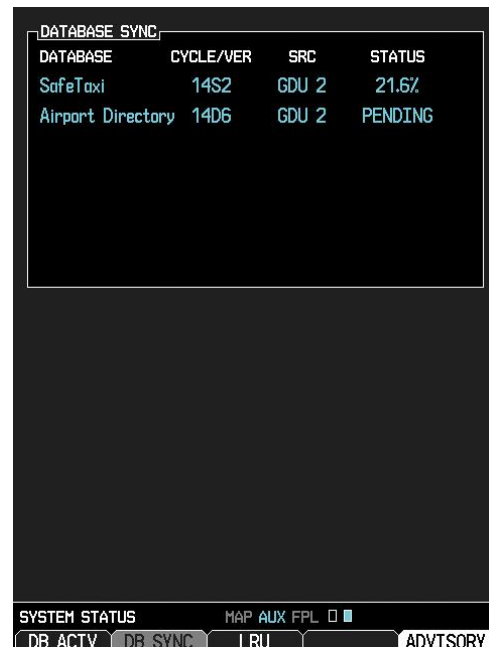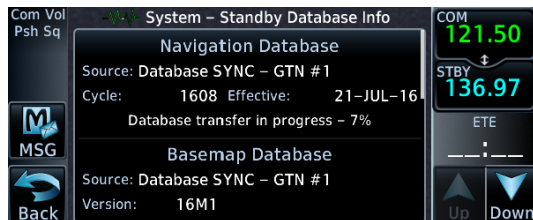
STEP 3: PROGRAM THE DATABASE CARD

☐ **Install the card in the PC** – Use the Garmin provided SD card reader (*required for the Flight Stream 510*) or an SD reader in the PC to plug the SD card into the PC.

☐ **Download and program the databases** – From the *Aircraft Details* page on flyGarmin, choose the "Update with SYNC" button. Follow the instruction to program the database card. This database card will store all the databases available for SYNC in the cockpit.
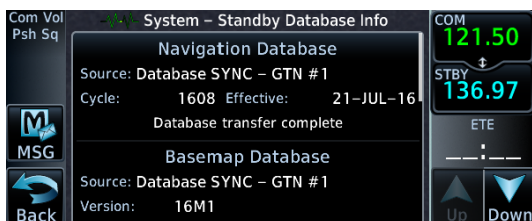
STEP 4: INSTALL THE DATABASES

☐ **Reinstall the SD card into the cockpit display** – When the database programming is complete, reinsert the SD card or Flight Stream 510 into the GTN and apply power. Database installation will be automatic based on the effectivity of the databases on the card.

☐ **Database SYNC** – Once the databases are updated in the GTN, they will automatically begin to transfer to the other Garmin displays and navigators. The Database SYNC progress can be monitored on the devices that are receiving databases from the GTN. Database Sync must be enabled on both the sending and receiving displays. On the GTN, this setting is in the *System Status* page menu. On the GDU, this setting is on the *System Setup* page of the AUX page group. All databases will be transferred with the exception of the terrain database.

☐ **Restart unit(s) to update databases on other displays** – After Database SYNC has completed, the units that received new databases will need to be restarted and the database updates installed. A shortcut will be displayed to restart the units if the aircraft on the ground. It is not necessary to wait for charts to completely SYNC to the other units if Chart Streaming will be used.

Chart streaming – If the Charts database has been updated on the GTN and other Garmin displays have older charts, the GTN will stream individual charts from the new database even before the entire database has transferred. The *Charts* page will notify the pilot when chart streaming begins.

TIPS AND TROUBLESHOOTING

BEST PRACTICE: UPDATE DATABASES BEFORE THE DATABASE EFFECTIVE DATE

This will allow databases to be activated automatically on their effective date. When the databases are programmed to the Flight Stream or SD card *before* their effective date, they are transferred in the background during normal flight operations via Database SYNC to all of the other applicable displays. They will become available when the GTN is powered on after the effective date. If the databases are updated *after* the effective date, a power cycle of each device is required in order to activate the databases for immediate use. Both methods are supported with Database Concierge.

HOW TO: RESOLVE DATABASE SYNC CONFLICTS

A conflict will exist if databases have the same cycle, but different regions. Resolve the conflicts with the RESOLVE CONFLICTS button on the display that just installed updated databases. If a Flight Stream 510 is in use, press the RESOLVE CONFLICTS button on the GTN that has the Flight Stream 510 installed.

After completion of database SYNC for all databases, check the databases on all devices to ensure the desired regions and cycles are present in the ACTIVE and STANDBY database positions. The active databases on all devices should match. Standby databases should contain the next cycle of databases (if they were installed prior to the effective date).

IMPORTANT NOTE: TERRAIN DATABASE UPDATES INELIGIBLE FOR DATABASE SYNC

Terrain databases are not eligible for Database SYNC and should be installed manually on each data card as needed.

Problem	Action
Unable to download databases to the SD card or Flight Stream 510	• Ensure you are using the Garmin supplied card programmer • Ensure that your card programmer is plugged directly into your computer and not into a USB hub, computer monitor, or keyboard • Ensure the sliding lock tab is in the unlocked position (up, when viewing the card label-side up)
Database update fails	• Restart the GTN and retry the update • Download the databases to the database card again • Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update
Database SYNC fails	• Ensure that the databases were purchased for all the GTNs and GDUs in the cockpit • Ensure that all conflicts have been resolved
Database cannot be selected for update	• Restart the GTN while pressing the dual-concentric knob until the Garmin logo is fully illuminated to view all database updates on the database card, regardless of effectivity • Download the databases to the database card again • Ensure that the databases were purchased for the system
Navigation database cannot be updated	• GTN software version 6.21 uses a different type of navigation database than previous versions. To ensure the proper database is installed for your version of GTN, program the database card at flyGarmin via the Windows PC and the card programmer.
Databases are not available in Garmin Pilot to download	• Ensure that the latest version of Garmin Pilot is installed on the portable device • Ensure that the flyGarmin account used to log into Garmin Pilot was the same as the flyGarmin account used to purchase the databases
Database cannot be transferred to Flight Stream 510	• Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update • Ensure that the database transfers are enabled for the Flight Stream 510 from the *System -> Connext Setup -> Flight Stream 510* page • Ensure that all database updates have been downloaded to the Garmin Pilot application • Press the Show All DBs key on the *Database Verification* page to view all database updates on the portable device, regardless of effectivity
Database is transferred to Flight Stream 510 but cannot be selected for update	• Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update • Ensure that the transferred database is currently effective • Restart the GTN while pressing the dual-concentric knob until the Garmin logo is fully illuminated to view all database updates on the Flight Stream 510, regardless of effectivity
Flight Stream 510 Wi-Fi not discoverable when viewing the *Database Concierge* page on the GTN	• Check Wi-Fi availability with another portable device • "Forget" the Wi-Fi network on the portable device and attempt to re-discover • Restart the GTN with the Flight Stream 510 • Remove the Flight Stream 510 and install it into the Garmin provided card reader in a PC. Use the PC operating system to reformat the Flight Stream 510.