

GTN DATABASE UPDATE GUIDE

FLIGHT STREAM 510, DATABASE CONCIERGE, AND DATABASE SYNC

OVERVIEW

This guide can be used to update the GTN database via Database Concierge. Using a Flight Stream 510, the database updates may be done wirelessly from a mobile phone or tablet using the Wi-Fi built into the Flight Stream. Databases will automatically sync to connected GTNs and G500/G600 displays using the Database Sync function. If preferred, the databases may also be updated by downloading directly from a PC onto the Flight Stream 510 or a data card. This document will explain steps for each method of GTN database updates.

WIRELESS UPDATE VIA DATABASE CONCIERGE

AIRCRAFT READINESS CHECKLIST

Visit your local Garmin dealer if any of the following items have not been completed:

- ☐ Flight Stream 510 is installed in aircraft
- ☐ Database SYNC is enabled on GTN(s) and G500/G600. This is necessary for all devices that will be synced with one database.
- ☐ To perform Database Sync:
 - ☐ GTN requires software version 6.21 or later.
 - ☐ G500/G600 requires software version 7.12 or later.
 - ☐ G500/600 TXi requires software version 2.00 or later.
 - ☐ Flight Stream 510 requires software version 2.10 or later.

BEFORE FIRST FLIGHT

When Flight Stream 510 is installed onto the aircraft, it is important to note that the aircraft will not have an active charts or terrain database until they are wirelessly transferred via the Database Concierge or loaded from a PC. Therefore, there are a few tasks that require a lead time and cannot be performed immediately before flight. Make sure the following steps are complete before the first flight with the Flight Stream 510:

1. Create a [flyGarmin](#) account. The username and password set up on flyGarmin will be the same login used on the Garmin Pilot app.

2. Once a profile is created on flyGarmin, add your aircraft and avionics to flyGarmin account.
 - a. System IDs from each of the displays will be needed to add avionics to the aircraft. The GTN System ID is found on the *System Status* page. On the G500/G600, the System ID is found at the bottom of the *System Status* AUX subpage.

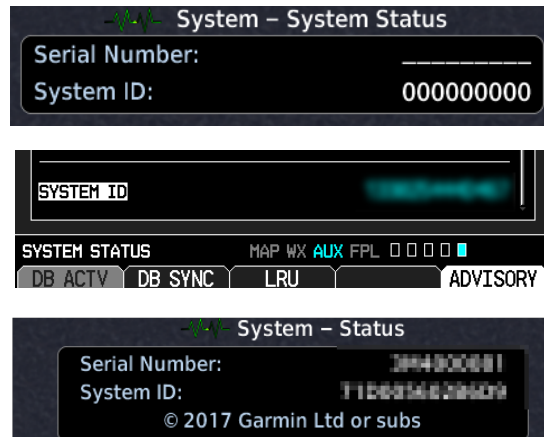
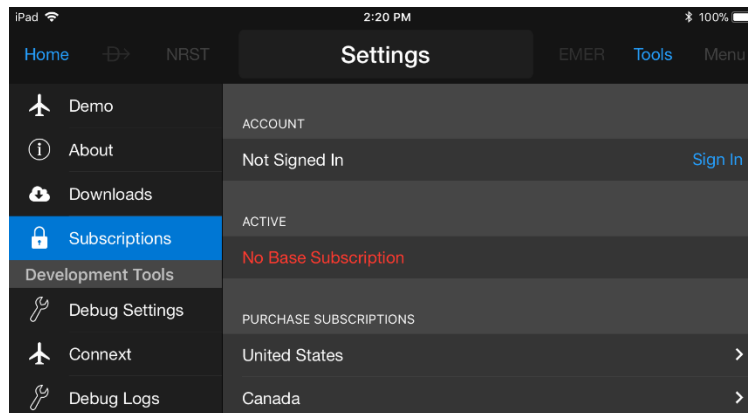


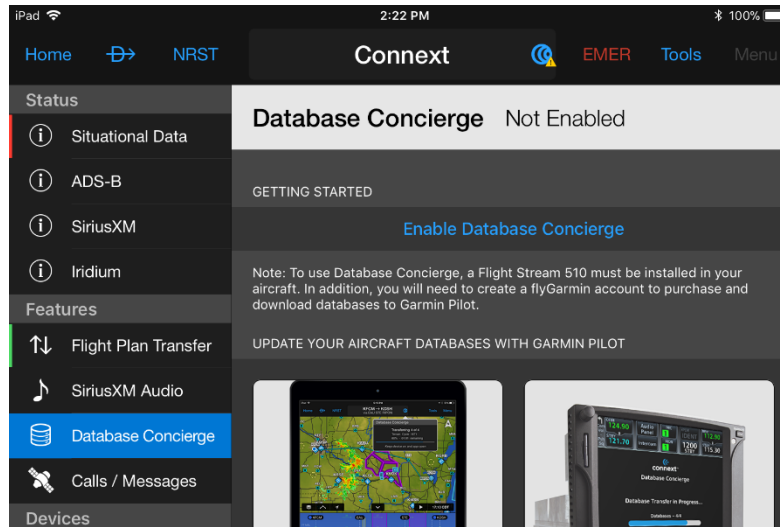
FIGURE 1: SYSTEM STATUS PAGES: GTN (TOP), G500/G600 (MIDDLE), G500/600 TXi (BOTTOM)

3. Purchase databases for avionics on flyGarmin – For best experience, purchase OnePak or PilotPak, which include database updates for a year for all Garmin displays in cockpit. **Only databases purchased with flyGarmin (except ChartView) are compatible with Database Concierge/Database SYNC. If you are subscribed to Jeppesen ChartView, link your Jeppesen account to your flyGarmin account using instructions in the Jeppesen ChartView section of this document.**
4. Activate a Garmin Pilot subscription on flyGarmin account. The Flight Stream 510 comes with a free 12-month subscription to Garmin Pilot.
5. Download Garmin Pilot application on mobile device or tablet device and log in using the same flyGarmin account used to purchase the databases.
 - a. Open Garmin pilot app and press *Home>Settings>Subscriptions* to find the Sign In button, as shown below:

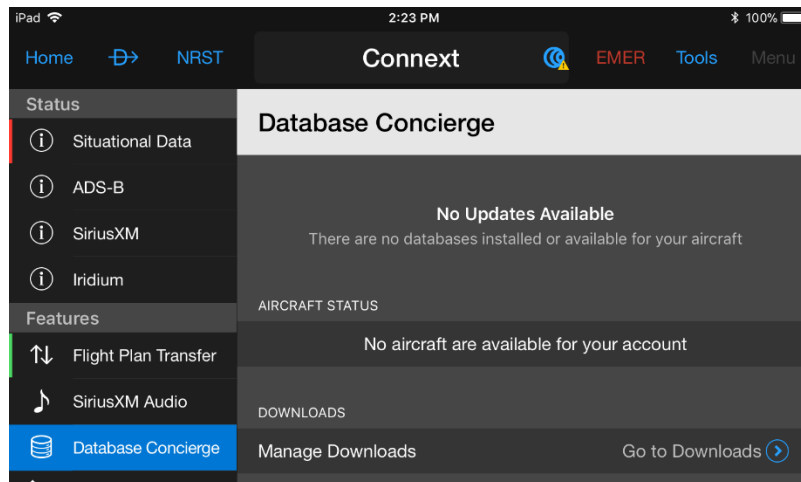


6. Enable Database Concierge in Garmin Pilot application.
 - a. Open Garmin Pilot application and login using flyGarmin credentials.
 - b. Press “Home” and select *Connnext* page.

- c. Select *Database Concierge* tab in the left column and then press “Enable Database Concierge”. See screenshot below:



- d. If you would like the latest databases automatically downloaded and ready to install into your aircraft, enable Auto-Download and Auto-Delete settings.
7. Download databases to mobile device in Garmin Pilot App
 - a. Mobile device must be connected to the internet.
 - b. Available databases should automatically download while Garmin Pilot is open.
 - c. To manage database downloads, press the “Go to Downloads” button on the *Database Concierge* page, as shown below:



- d. Once all databases are downloaded, the mobile device is ready to wirelessly transfer them to the GTN.

WIRELESS DATABASE TRANSFERS TO YOUR AVIONICS

This section explains how to make the wireless transfer of databases from the mobile device to the GTN and ensure that the Database SYNC has completed. Make sure that if you have Jeppesen ChartView databases to wirelessly sync that you have completed the steps in the *Jeppesen ChartView* section before continuing onto this section.

1. Once GTN with the Flight Stream 510 installed has powered on, do not navigate beyond the Database page on initial startup, as shown below:

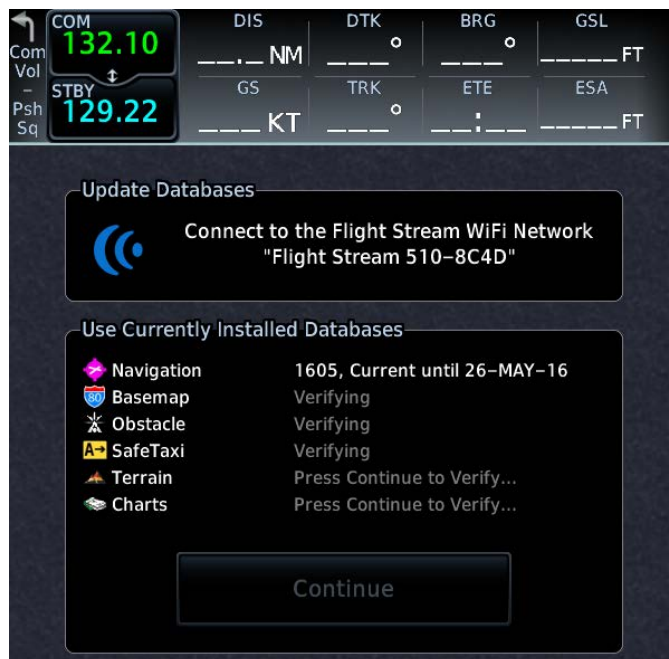


FIGURE 2: DATABASE STARTUP PAGE

2. While on this page, connect the mobile device to the Flight Stream 510 Wi-Fi network. The "Show Wifi Info" button will provide the username and password for the Flight Stream 510 Wi-Fi network.
3. The GTN will prompt a list of databases to transfer. Select desired databases and press "Start". The terrain and charts databases may take up to 5 minutes each. All other databases should transfer within one minute.
4. When the transfer is complete, the Flight Stream Wi-Fi network will turn off automatically and the GTN will install the databases it has received.
5. Once databases are updated in the GTN, they will automatically begin the Database SYNC with other Garmin displays and Navigators.
 - a. To monitor Database SYNC progress, navigate to *System Status* page on GTN or *System Setup* (AUX subpage) on G500/G600.



FIGURE 3: DATABASE SYNC STATUS: GTN (TOP), G500/G600 (MIDDLE), G500/600 TXi (BOTTOM)

6. After Database SYNC has completed, the units that received new databases will need to be restarted and database updates installed. Note: G500/600 and GTN will not prompt to restart if the unit is in air. If syncing in the background, such as for charts, it may take until the next power cycle to complete.
7. **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.

DATABASE UPDATE USING DATA CARD AND PC

AIRCRAFT READINESS CHECKLIST

Visit your local Garmin dealer if any of the following items have not been completed:

- ☐ The dealer will need to enable Database SYNC on GTN(s) and G500/G600. This is necessary for all devices that will be synced with one database.
- ☐ To perform Database Sync:
 - ☐ GTN requires software version 6.21 or later.
 - ☐ G500/G600 requires software version 7.12 or later.
 - ☐ G500/600 TXi requires software version 2.00 or later.

BEFORE FIRST FLIGHT

In order to use Database SYNC on GTN(s) and G500/G600, all databases must be purchased through flyGarmin (except ChartView). Follow the instructions in this section to get these databases installed on a data card via PC.

1. Create a [flyGarmin](#) account. The username and password set up on flyGarmin will be the same login used on the Garmin Pilot app.
2. Once a profile is created on flyGarmin, add your aircraft and avionics to flyGarmin account.
 - a. System IDs from each of the displays will be needed to add avionics to the aircraft. The GTN System ID is found on the *System Status* page. On the G500/G600, the System ID is found at the bottom of the *System Status* AUX subpage.

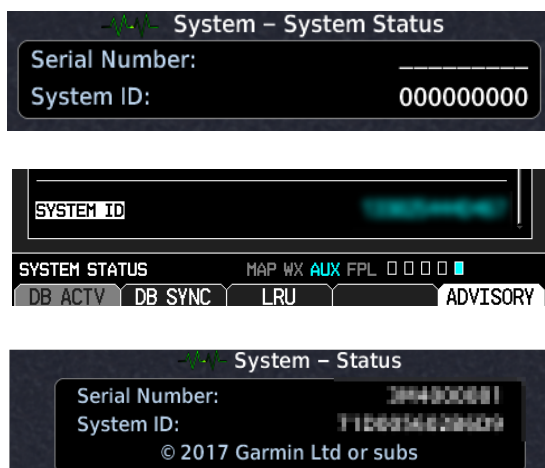


FIGURE 4: SYSTEM STATUS PAGES: GTN (TOP), G500/G600 (MIDDLE), G500/600 TXi (BOTTOM)

3. Purchase databases for avionics on flyGarmin – For best experience, purchase OnePak or PilotPak, which include database updates for a year for all Garmin displays in cockpit. **Only databases purchased with flyGarmin (except ChartView) are compatible with Database Concierge/Database SYNC. If you are**

subscribed to Jeppesen ChartView, link your Jeppesen account to your flyGarmin account using instructions in the *Jeppesen ChartView* section of this document.

4. 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.
5. Download and program the databases – From the *Aircraft Details* page on [flyGarmin](http://flyGarmin.com), choose the “Update with SYNC” button. Follow the instructions to program the database card. This database card will store all the databases available for SYNC in the cockpit.

DATABASE SYNC

1. When the database programming is complete, insert 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.
2. Once databases are updated in the GTN, they will automatically begin the Database SYNC with other Garmin displays and Navigators.
 - a. To monitor Database SYNC progress, navigate to *System Status* page on GTN or *System Setup* (AUX subpage) on G500/G600.

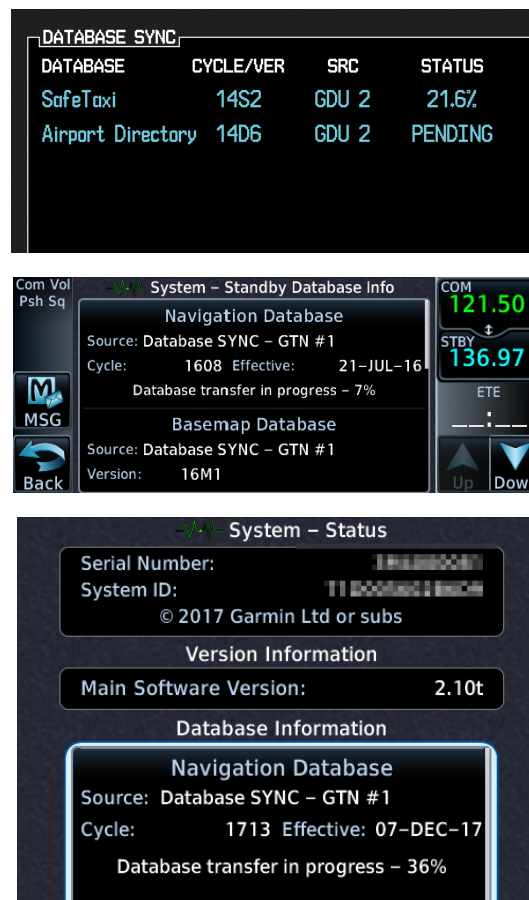


FIGURE 5: DATABASE SYNC STATUS: GTN (TOP), G500/G600 (MIDDLE), G500/600 TXi (BOTTOM)

3. After Database SYNC has completed, the units that received new databases will need to be restarted and database updates installed. Note: G500/600 and GTN will not prompt to restart if the unit is in air. If syncing in the background, such as for charts, it may take until the next power cycle to complete.
4. **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.

JEPPESEN CHARTVIEW

The Database Concierge and Database Sync are compatible with subscriptions to Jeppesen ChartView. Follow the instructions below on how to link your Jeppesen account with your flyGarmin account:

1. On Garmin Pilot app, go to *Settings > Jeppesen* and log in to your Jeppesen account.
2. Select a license to activate with a matching tail number to the aircraft registered in your flyGarmin account. Activate the license and download all the Jeppesen database files to the tablet.
3. Do a Database Concierge sync by pressing *Home > Connex > Sync Now*.

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.

TROUBLESHOOTING

Problem	Action
Unable to download databases to the SD card or Flight Stream 510	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 <i>System -> Connex Setup -> Flight Stream 510</i> page. • Ensure that all database updates have been downloaded to the Garmin Pilot application. • Press the Show All DBs key on the <i>Database Verification</i> page to view all database updates on the portable device, regardless of effectivity. <ul style="list-style-type: none"> • The Show All DB key will appear on the Database Verification page if all databases are up to date and there are different regions with the same cycle downloaded on your tablet.

<p>Database is transferred to Flight Stream 510 but cannot be selected for update</p>	<ul style="list-style-type: none"> • 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.
<p>Flight Stream 510 Wi-Fi not discoverable when viewing the <i>Database Concierge</i> page on the GTN</p>	<ul style="list-style-type: none"> • 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.
<p>Databases will not sync to G500/G600 prior to effective date.</p>	<ul style="list-style-type: none"> • G500/G600 does not preload future charts databases. • Database SYNC will automatically initiate once charts database becomes effective.

REFORMATTING FLIGHT STREAM 510

In some instances, reformatting of the Flight Stream 510 may be necessary. Follow the steps below to format the Flight Stream.

1. Locate Flight Stream 510 Drive on computer by selecting “Disk Utility” on an Apple device or “This PC” on a Windows device.

FIGURE 4: LOCATING FLIGHT STREAM 510 ON APPLE DEVICE

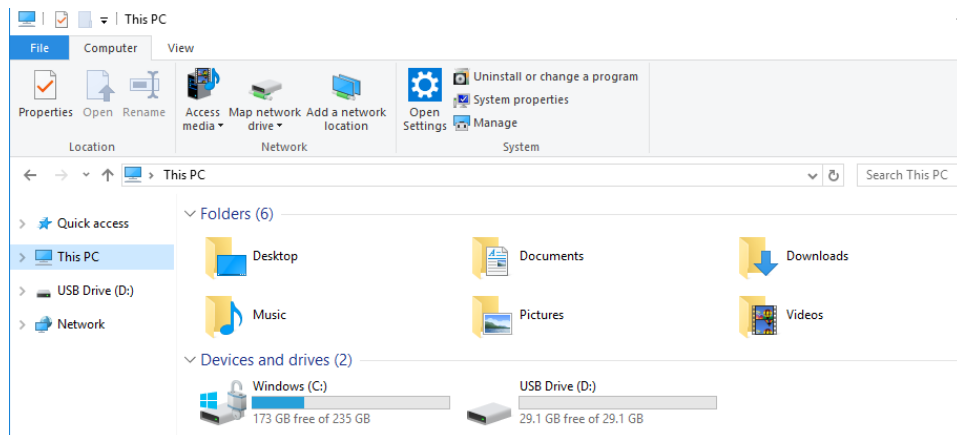


FIGURE 5: LOCATING FLIGHT STREAM 510 ON WINDOWS DEVICE

2. Open the drive where the Flight Stream 510 is located. This will be found under “USB Drive” for Windows devices and “External” for Apple devices.

3. Erase drive and reformat the settings as follows:

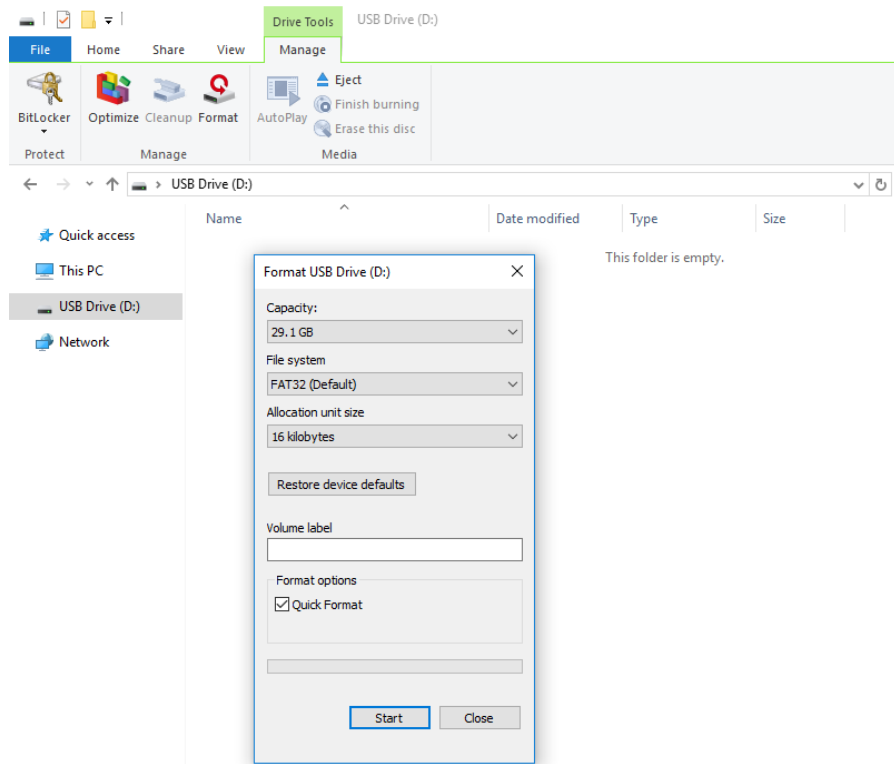


FIGURE 6: FORMAT SETTINGS ON WINDOWS DEVICE

FIGURE 7: FORMAT SETTINGS ON APPLE DEVICE