



# **GDL 69/69A**

## **XM<sup>™</sup> Satellite Radio**

### **Activation Instructions**

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# 1 Overview

## 1.1 Introduction

Before the GDL 69/69A can be used, the unit must have services subscribed to and be activated by XM Satellite Radio. This document will take you through the process. Please note that the GDL 69 is a weather data link. The GDL 69A is a weather data link AND audio receiver. This document covers the GDL 69/69A - MX20 Activation, the GDL 69/69A – G1000 Activation, and lastly the GDL 69 – 430/530 Activation. Before activating the GDL 69/69A must be installed in accordance with the installation manual P/N 190-00355-02.

## 1.2 Gather Information

Your GDL 69 or GDL 69A is shipped with one or two radio hardware identifications, respectively (Radio IDs). These IDs serve as identification codes for your XM-equipped GDL 69/69A and are needed in the activation process. The ID(s) is attached to the last page of this document. It is also printed on a label on the back of the unit. The IDs can also be retrieved through the interfaced control display unit (i.e. G1000, MX20, 430/530, etc.) which will be addressed in the following pages. Contact your dealer if you are unable to locate the radio hardware IDs. Be sure to visit <http://www.garmin.com> and verify that you have the latest revision of the Pilot's Guide for the MX20 (P/N 560-1026-( )) and the G1000 for your particular aircraft. For the GNS 430/530, you'll need the latest revision of the Pilot's Guide Addendum (P/N 190-00140-13).

<b>NOTE</b>
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If your aircraft has not been powered on for more than six months your XM subscription will have been automatically deactivated. In the event that this happens you will need to refresh the unit. Refer to Section 2.2 (MX20), 3.4 (G1000), or 4.4 (GNS 430/530) for the procedure on 'Refreshing'.

## 2 MX20 - GDL 69/69A Activation

The MX20 must be correctly configured to accept information from a GDL 69A, in accordance with P/N 560-1025-( ).

### 2.1 Activation Steps

1. Make sure that the aircraft's XM antenna has an unobstructed view of the southern sky. It is not recommended for the aircraft to be in a hangar.
2. Hook up the aircraft to external power if available. It may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. Power on the avionics and allow the MX20 to power up.
4. Verify that the yellow "GDL 69" failure flag is not displayed. The absence of a failure flag confirms that the MX20 is communicating with the GDL 69/69A.
5. On the MX20 go to the XM Activation Page (See Section 2.1.1) and verify that the data radio ID is displayed. For GDL 69A installations, verify that the audio radio ID is also displayed.
6. To activate service, call XM at 1-800-985-9200. When activating the data service, specify Aviator Lite, Aviator, or Aviator Pro (Aviator Pro is not available at time of this printing).
7. Do not power cycle the units during the activation process. If aircraft is on battery power, you may turn on avionics after calling in the activation procedure. If a power cart is available, leaving the avionics power on during the call may speed up activation.

- For GDL 69A units, the audio portion is activated independently from the weather. The activations will not be simultaneous. Once the data channel is activated, bring up the XM Radio page on the MX20. This can be accomplished by pressing the **FN** key until XM is displayed. Press the smart key below **XM**. A non-activated unit will display only channel 0 (Radio ID), channel 1 (XM Preview) and channel 247 (Emergency Alert). An activated unit will display the full list of XM's channels. Tune to channel 1, while waiting for audio activation.

### 2.1.1 Accessing the MX20 Activation Page

To access the activation page on the MX20 perform the following steps:

- Press the **FN** key until the **FIS** function is displayed. Press the smart key below **FIS**.
- Press the fourth smart key until **STATUS** is displayed.
- Press **MENU/ENT** button.
- Press the line select key next to **Products**. **Diagnostics** and **Start Diag** will be displayed. (In software version 5.5, **Start Diag** will not be displayed).
- Press the line select key next to **Diagnostics**.
- Activation** will be displayed. XM Service should activate in 45 to 60 minutes. During the activation process, the unit may display several different activation levels. This is normal, and should be ignored. When the service class (Aviator Lite, Aviator, or Aviator Pro) that you subscribed to is displayed, press the **ACCEPT** smart key to lock in the activation. At the time of printing, Aviator Pro is not available.



Figure 2-1. Data Radio ID and Audio Radio ID Locations



Figure 2-2. MX20 with Full Channel List

## 2.2 Refreshing

If the unit is not activated after one hour a 'refresh' maybe needed. To accomplish this go to the website [www.xmradio.com/refresh](http://www.xmradio.com/refresh) as pictured below. Follow the instructions as described on the website. If you are refreshing both the data (weather) package and the audio package, you'll have to do the refresh steps twice.

**ACTIVATION REFRESH**

To refresh a radio previously activated through the Listener Care Center or XM's eCare Website, please follow the instructions below.

**Step 1:** Position your XM Radio Antenna so that it has clear view to the sky.

**Step 2:** Turn on your XM Radio and tune to Channel 0 to obtain the 8-Digit XM Radio ID. Then, tune your Radio to the Channel 1, the XM Preview Channel, to confirm that you are receiving the XM Signal. *NOTE: Please check your ID code carefully. There is no "I" (eye), "o" (oh), "S" or "F" used.*

**Step 3:** Enter the 8-Digit XM Radio ID Here:

Home   Activate Radio   Listener Care   Newsletter   About Us   Contact Us   News   FAQ

**Figure 2-3. Activation Refresh Page**

After entering the radio ID, a success message or failure message will appear. Both are pictured below. If a failure message is received, then the radio ID entered is not in the system or a refresh signal request has already been entered into the XM system in the past 2 hours. Only one refresh signal can be sent over the XM system in a given 2-hour period. Call XM to confirm the activation of the radio.

**ACTIVATION REFRESH**

**Congratulations!**

Your request has been submitted for processing. With your radio turned on and tuned to the XM Preview Channel, you should receive your XM channels within the next 15 minutes. From the Preview Channel, scroll up using your tuner until you are able to see and listen to XM Channels in a sequence (i.e. 4, 5, 6, 7, etc.). Make sure you can hear channels 7, 9, 47, and 122. This will be your confirmation that your radio has been fully activated. Enjoy!

If you don't receive the XM activation signal within 30 minutes of this request, please call the XM Listener Care Center at 1-800-852-9696.

[Refresh Activation on Another XM Radio >](#)

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**Figure 2-4. Webpage Success Message**

**ACTIVATION REFRESH**

**We're Sorry! We are unable to activate your radio.**

An error has been identified preventing your request from being completed. Please call XM Listener Care at 1-800-852-9696 for assistance or check the Radio ID and re-submit.

[Refresh Activation on Another XM Radio >](#)

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**Figure 2-5. Webpage Failure Message**

After either receiving a success message or resolving the issue with XM, try the activation steps in Section 2.1 again. If you still are having trouble, call Garmin technical support.

## 2.3 Test the GDL69/69A with the MX20

After activation with XM, you will have a certain amount of time to turn on the GDL 69/69A to let the unit acquire its activation status. You will be informed of this time duration during the activation process with XM. Turn on the unit to the activation page as outlined in Section 2.1.1. After the unit has acquired its activation status, all subscribed XM services should be displayed on the control display unit. Your GDL 69/69A is now ready for use.

If nothing is displayed for XM services, cycle power to unit and try again. Contact XM Satellite Radio or your dealer if the symptoms persist.

## 3 G1000 – GDL 69/69A Activation

Prior to contacting XM, the GDU must be on and operational. For activation you will need your XM Audio Radio ID, XM Data Radio ID and your billing information. Your XM Audio Radio ID and Data Radio ID can be found on the last page of this document. If for some reason you do not have your IDs, you will be able to find your Radio IDs on the XM page in the **AUX** group. The steps below will take you through the process.

1. Make sure that the aircraft's XM antenna has an unobstructed view of the southern sky. It is not recommended for the aircraft to be in a hangar.
2. Hook up the aircraft to external power if available. It may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. Power on the avionics and allow the G1000 to power up.
4. Rotate the outer **FMS** knob clockwise until the **AUX - TRIP PLANNING** page displays. See Figure 3-1.

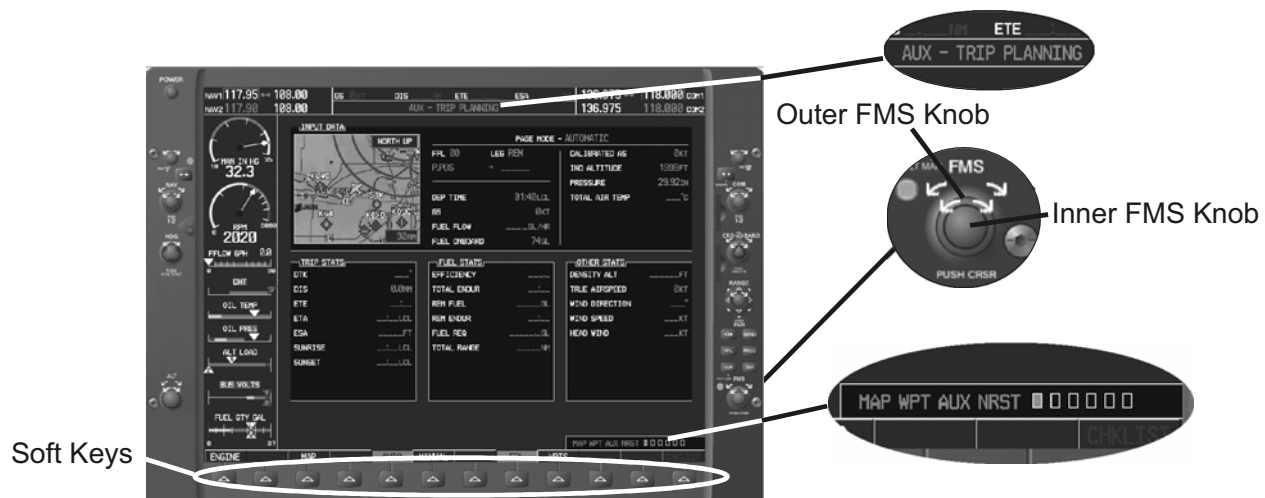


Figure 3-1. AUX - TRIP PLANNING Page

6. Rotate the inner **FMS** knob clockwise until the **AUX-XM** page is displayed. Your **Audio Radio ID** and **Data Radio ID** will be displayed. See Figure 3-2 for these locations.
7. A list of **Weather Products** will also be shown on the bottom half of the screen. Boxes filled in green will correspond with the type of subscription you have access. For example, if the weather subscription you have purchased allows NEXRAD, the box next to NEXRAD will be filled in.



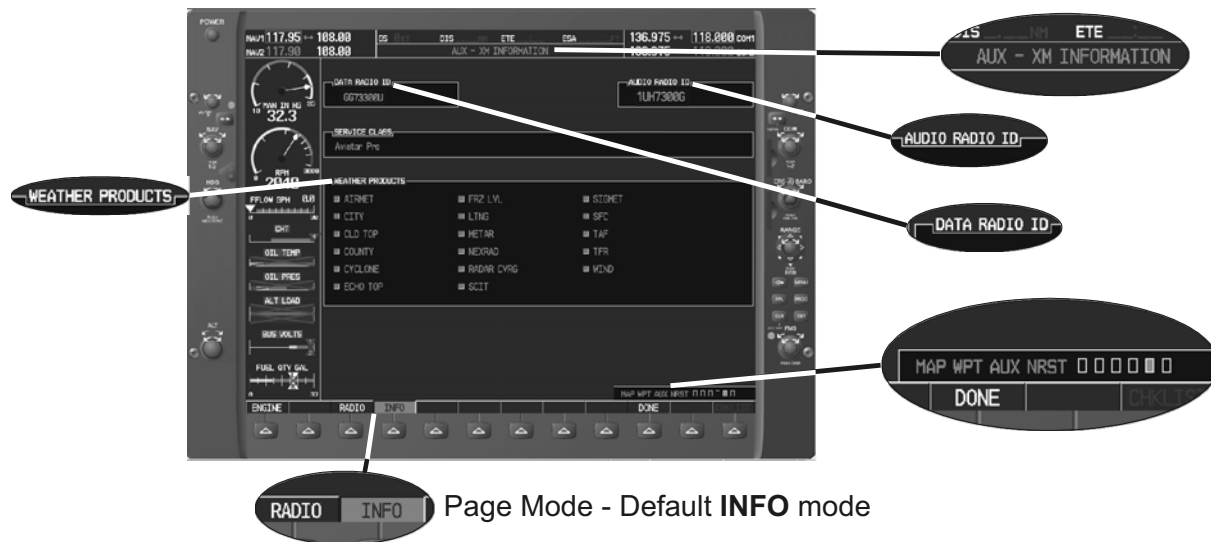


Figure 3-2. XM Information Page

### 3.1 Verify the Radios are Ready to be Activated

The **AUX - XM** page has two modes, Radio Information and Radio Operation. The page should default to **INFO** mode (if the radio is not activated). This is the page you will need to be on when you call for activation. You can change modes with the **RADIO/INFO** soft keys. The **INFO** page should look like Figure 3-2.

Pressing the **RADIO** smart key will display the **AUX - XM RADIO** page and will look similar to Figure 3-3. If the radio is inactivated and working properly, you will see the free-to-air channels. If the radio is inactivated and working properly the G1000 will display the free-to-air channels, which are channel 0 (Radio ID), channel 1 (XM Preview) and channel 247 (Emergency Alert). If you can see the free-to-air channels and listen to channel 1, you are ready to activate your radios. Press the soft key under **INFO** and the page will return to the **INFO** page.

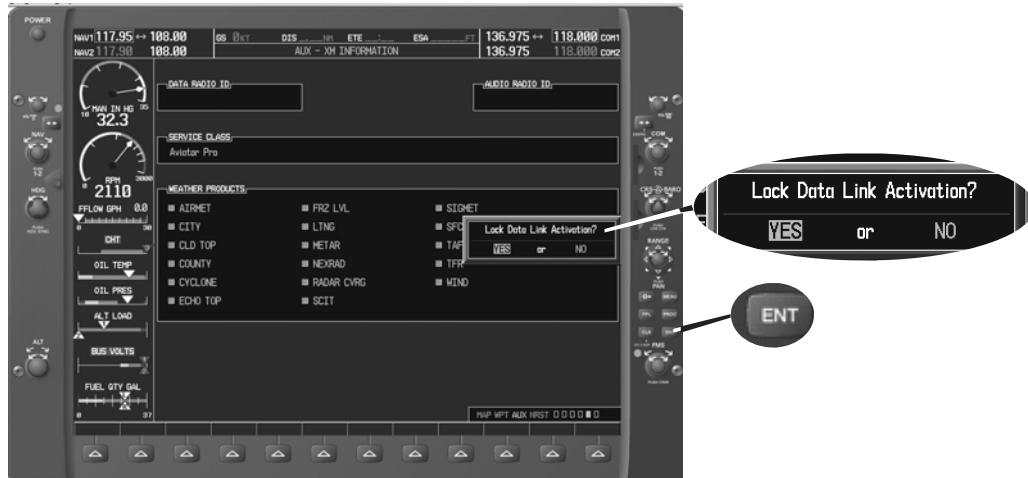


Figure 3-3. AUX - XM Radio Page

### 3.2 Activating the Radio

The G1000 needs to be on the **INFO** page for activation. Call 1-800-985-9200 and the XM operator will ask you for your Data Radio ID and Audio Radio ID. Activation should begin once the XM operator has

all your information. During activation the **INFO** page will show the various Weather Products being activated. Once activation has been completed, verify that the Service Class and Weather Products shown are the services that you purchased. If you are satisfied that you received the products you requested, press the soft key under **DONE**. This will bring up a small inset window as shown in Figure 3-4. Press the **ENT** key lock in your activation.



**Figure 3-4. Lock Activation Screen**

### 3.3 Verifying Subscribed Services

When the data radio (weather receiver) has been activated, the subscription level will be shown in the service class field. You can see that the activation was successful by pressing the soft key under **RADIO**. You should see a complete listing of all the channels of your subscription as shown in Figure 3-5.



**Figure 3-5. Channel Listings Screen**

### 3.4 Refreshing

If the unit is not activated after one hour a 'refresh' maybe needed. To accomplish this go to the website [www.xmradio.com/refresh](http://www.xmradio.com/refresh) as explained in Section 2.2. When asked for the Radio ID number on the website, enter the ID number of the service you are refreshing, either your audio package or your data (weather) package. If refreshing both, you'll have the opportunity to 'refresh another XM radio'.

## 4 GNS 430/530 – GDL69 Activation

For activation you will need your XM Data Radio ID and your billing information. If your unit is a GDL 69A, which comes with a Data Radio ID and an Audio Radio ID, only the Data Radio ID is needed, since the GNS 430/530 does not support audio services. Your Data Radio ID can be found on the last page of this document and on the 430/530 Data Link Status page (see Section 4.2 below).

### 4.1 Activation Steps

1. Make sure that the aircraft's XM antenna has an unobstructed view of the southern sky. It is not recommended for the aircraft to be in a hangar.
2. Hook up the aircraft to external power if available. It may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. Power on the avionics and allow the GNS 430/530 to power up.
4. Call XM Satellite Radio 1-800-985-9200. The XM operator will ask you for your Data Radio ID.

### 4.2 Verify Signal Reception

1. Access the GDL 69 Data Link Status Page. This page can be found by rotating the **outer knob** until the **AUX** menu page displays.
2. Rotate the inner knob until the **DATA LINK** page with the item **DATA LINK STATUS** is listed.

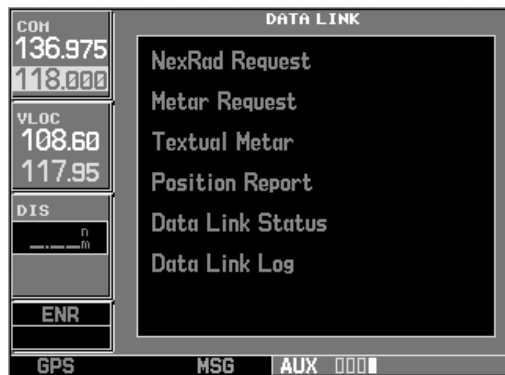


Figure 4-1. Data Link Menu Page

3. Press the **CRSR** knob. The first item on the page will blink. Turn either the outer knob or inner knob clockwise until **DATA LINK STATUS** is blinking.
4. Press the **ENT** button. The following page will be displayed.

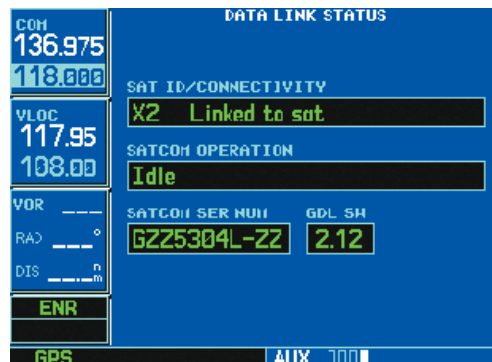


Figure 4-2. Data Link Status Page

5. Refer to Table 4-1 to read the **SAT ID/CONNECTIVITY** information.

- Verify radio IDs and signal quality is between 1 – 3. If signal quality is zero, check the antenna and wiring.

**Table 4-1. Data Link Status**

SAT ID Field	
'- -'	GDL 69/69A – 430/530 Series interface communications not yet established.
'XM'	GDL 69/69A not yet communicating with internal satellite radio hardware (normal during power-up).
'X0', 'X1', 'X2', or 'X3'	'X' = Satellite radio service activated. Satellite signal quality is indicated by the numbers 0, 1, 2, or 3; where 0=none, 1=poor, 2=good, and 3=excellent.
'-0', '-1', '-2', or '-3'	'-' = Satellite radio service is not activated. Satellite signal quality is indicated by the numbers 0, 1, 2, or 3; where 0=none, 1=poor, 2=good, and 3=excellent.
Connectivity Field	
"Searching..."	No satellite is currently in view, signal quality is '0'.
"Satellite in view"	Indicates a signal quality between 1 and 3.

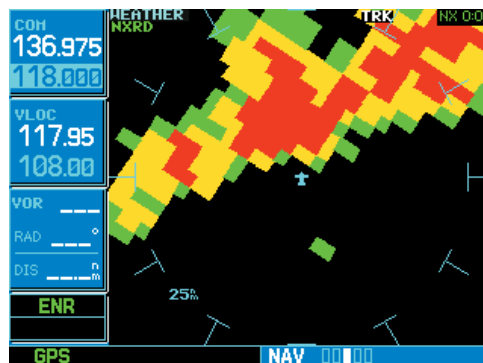
### 4.3 Verify XM Subscribed Services

The 430/530 supports the following weather services: NEXRAD, graphical METAR, text-based METAR, Wind, and Graphical Temperature/Dew Point. Depending on the subscription, one or more of these services may not be included. Verify included services by displaying them on the unit, if applicable. If signal quality is between 1 and 3, but no data is displayed, contact XM Satellite Radio to verify subscription.

#### 4.3.1 Verify NEXRAD

To select the Weather Page from the Data Link Page:

- Turn the **large outer knob** on the right and move through the Page Groups until the NAV Page Group is selected.
- Turn the **small inner knob** on the right until the Weather Page is selected. NEXRAD data is displayed on the screen similar to Figure 4-3, if available.



**Figure 4-3. Weather Page**

#### 4.3.2 Verify Graphical METAR

To display Graphical METARs on the NAV Weather Page:

- Select the NAV Weather Page.
- Press **CRSR**. The upper left hand corner field flashes.

3. Turn **small right knob** and select 'METAR'.
4. Press **CRSR**. Graphical METAR data is displayed on the screen similar to Figure 4-4, if available.



Figure 4-4. Graphical METAR Page

### 4.3.3 Verify Textual METAR

To select the METARs Text Page:

1. Select the Data Link Page.
2. Select 'Textual METAR'.
3. Press **ENT**. The Textual METAR Page is displayed for the airport you selected similar to Figure 4-5, if available. You can enter a different identifier by highlighting 'TEXTUAL METAR' and press **ENT**. Turn the **small right knob** and scroll through the list of four letter identifiers.



Figure 4-5. Textual METAR Page

### 4.3.4 Verify Wind

To display wind data on the NAV Weather Page:

1. Select the NAV Weather Page.
2. Press **CRSR**. The upper left hand corner data field flashes.
3. Turn the **small right knob** and select 'WINDS'.
4. Press **CRSR**. The wind icons are displayed on the NAV Weather Page similar to Figure 4-6, if available.



Figure 4-6. Wind Data Page

### 4.3.5 Verify Temperature/Dewpoints

To display Temperature/Dewpoints on the NAV Weather Page:

1. Select the NAV Weather Page.
2. Press **CRSR**. The upper left hand corner data field flashes.
3. Turn the **small right knob** and select 'TEMP/DP'.
4. Press **CRSR**. The Temperature/Dewpoints are displayed on the NAV Weather Page similar to Figure 4-7, if available.



Figure 4-7. Temperature/Dewpoints Page

## 4.4 Refreshing

If the unit is not activated after one hour a 'refresh' maybe needed. To accomplish this go to the website [www.xmradio.com/refresh](http://www.xmradio.com/refresh) as explained in Section 2.2. When asked for the Radio ID number on the website, enter the Data ID number and then follow the steps as outlined on the website. If you still are having trouble, call Garmin technical support.



# **IMPORTANT!**

**CONTAINS GDL 69/69A INFORMATION  
REQUIRED FOR XM SATELLITE RADIO  
ACTIVATION**

**This document MUST be given to the aircraft  
owner at time of delivery.**

# **IMPORTANT!**

**CONTAINS GDL 69/69A INFORMATION  
REQUIRED FOR XM SATELLITE RADIO  
ACTIVATION**

**This document MUST be given to the aircraft  
owner at time of delivery.**

PLACE  
XM RADIO ID#  
HERE