



GDL 69 Series XM[™] Satellite Radio Activation Instructions

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1 Overview

1.1 Introduction

The term “GDL 69 Series” used throughout this document refers to the GDL 69, GDL 69A, GDL 69H, and GDL 69AH.

Before the GDL 69 Series 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 69/69H is a weather data link only. The GDL 69A/69AH is a weather data link AND audio receiver. This document covers the GDL 69 Series - MX20 activation, the GDL 69 Series – G1000/G900X/G950 activation, GDL 69/69H – GNS 430/530 activation, the GDL 69 Series – GNS 430W/530W activation, GDL 69 Series – G500/G600 activation, GDL 69 Series – GMX 200 activation, GDL 69 Series – GTN 625/635/650 activation and lastly the GDL 69 Series – GTN 725/750 activation. There is a separate procedure for each type of installation. Before activating, the GDL 69 Series must be installed in accordance with the GDL 69/69A Installation Manual, P/N 190-00355-02 Rev E or later (STC Installation Manual) or the GDL 69 Series TSO Installation Manual, P/N 190-00355-07 Rev B or later.

It is essential to follow the activation instructions carefully, correctly, and completely. Improper activation may result in an installation that receives an incomplete set of weather products, or an installation that functions only part of the time.

1.2 Gather Information

Your GDL 69/69H or GDL 69A/69AH is shipped with one or two radio hardware identifications, respectively (Radio IDs). These IDs serve as identification codes for your XM-equipped GDL 69 Series and are needed in the activation process. The Audio ID is for the XM radio service, and the Data ID is for the weather products. The GDL 69/69H will have a Data ID whereas the GDL 69A/69AH will have an Audio ID AND a Data ID. The ID information is attached to the last page of this document. It is also printed on a label on the back of the unit. Be sure to visit <http://www.garmin.com> and verify that you have the latest revision of the documents listed in Table 1-1 that pertain to your equipment.

Table 1-1. Documents

Unit	Document	Part Number
MX 20 MFD	MX 20 Pilot's Guide	560-1026-()
GNC 420(A)	GNC 420(A) Pilot's Guide and Reference	190-00140-20
GNS 430(A)	GNS 430(A) Pilot's Guide and Reference	190-00140-00
400W Series or 500W Series	400W/500W Series Pilot's Guide Addendum	190-00356-30
GPS 400	GPS 400 Pilot's Guide and Reference	190-00140-60
GPS 500	GPS 500 Pilot's Guide and Reference	190-00181-60
GNS 530(A)	GNS 530(A) Pilot's Guide and Reference	190-00181-00
GMX 200	GMX 200 Pilot's Guide	190-00607-02
GDU 620	G600 Pilot's Guide	190-00601-02
	G500 Pilot's Guide	190-01102-02
G900X	G900X Pilot's Guide	190-00726-00
G950	G950 Pilot's Guide	190-00870-()
G1000 Integrated Flight Deck	G1000 Pilot's Guide	www.garmin.com
GTN 625/635/650	GTN 625/635/650 Pilot's Guide	190-01004-03
GTN 725/750	GTN 725/750 Pilot's Guide	190-01007-03

NOTE



If your aircraft has not been powered on for an extended period of time your XM subscription may 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/G900X/G950), 4.4 (GNS 430/530), 5.3 (GNS 430W/530W), 6.2 (GMX 200), 7.2 (G500/G600), 7.4 (GTN 625/635/650 and GTN 725/750) for the procedure on ‘Refreshing’.

2 MX20 - GDL 69 Series Activation

The MX20 must be correctly configured to accept information from a GDL 69 Series, in accordance with the MX20 Multi-Function Display Installation Manual, 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 highly recommended that the aircraft be outside of and away from the hangar.

2. **Hook up the aircraft to external power if available.**

The complete activation process 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 and GDL 69 Series to power up.**

Do not power cycle the units during the activation process.

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 Series.

5. **Go to the XM Activation Page.**

- a) Press the **FN** key until the **FIS** function is displayed. Press the FIS smart key.
- b) Press the fourth smart key until **STATUS** is displayed.
- c) Press the **MENU/ENT** key.
- d) 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.)
- e) Press the line select key next to **Diagnostics**.
- f) **Activation** will be displayed.

6. **To activate service, call XM at 1.800.985.9200.**

When activating the data service, specify Aviator LT, Aviator, or Aviator Pro. 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 LT, Aviator, or Aviator Pro) and **all** of the weather products for the class that you subscribed to are displayed, press the **Accept** smart key. See Table 2-1 for weather products available for the MX20. Wait 10 to 30 seconds to allow the GDL 69 Series to process the accept command and lock in the activation.

NOTE



Make sure to be specific for requesting a DATA ONLY service under the Data Radio ID and an AUDIO ONLY service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.



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



Figure 2-2. MX20 with Full Channel List

7. For GDL 69A/69AH 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 XM smart key. A non-activated unit will display only channel 0 (Radio ID) and channel 1 (XM Preview). An activated unit will display the full list of XM channels. Tune to channel 1, while waiting for audio activation. Wait for the XM display to become populated with the XM channel list (see Figure 2.2 above for an example of what this looks like).
8. **Select an XM channel in order to lock in the radio activation.** Channels 0 and 1 are free preview channels and should not be used for this procedure. Press the **Chan** smart key and then press either the Up or Down Arrow key to select a new channel. Wait for the channel to be displayed in the Active Channel box at the top of the XM display. The XM radio activation is complete when the channel is displayed.

Table 2-1. MX20 Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
City Forecasts	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
County Warnings	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
AIRMETs		✓	✓
SIGMETs		✓	✓
Echo Tops		✓	✓
Severe Weather Storm Tracks		✓	✓
Satellite Mosaic		✓	✓

2.2 Refreshing

If the unit is not activated after one hour (1.5 hours for the GNS 430/530 and GNS 430W/530W) a ‘refresh’ may be needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action 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.

Send a Radio Activation Signal

Please turn your radio on with the antenna facing skyward and tune to channel 184 for Sirius or channel 1 for XM. (If your radio is in a vehicle, please make sure it isn't in a garage.) Once you're ready, press the button below and service should be activated within 15 minutes. If your radio isn't working after that time, you can resend the signal.

*** Required**

*** Radio ID (ESN or SID)** [Help me find my Radio ID](#)

 **For XM Radios**
 You can display your Radio ID by tuning your radio to channel 0, one down from XM Preview. Please check your ID code carefully. The letters "T", "O", "S", and "F" are not used.
[Get additional help](#)

 **For Sirius Radios**
 There are a couple ways to find your Radio ID (also called an ESN or SID). For many radios you can simply tune to channel 0 and the Radio ID will be displayed. If it doesn't appear, your Radio ID may also be found by accessing the Menu function of your radio (you can refer to your owner's manual for specific instructions). Still can't find it?
[Get additional help](#)

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 3 hours. Only one refresh signal can be sent over the XM system in a given 3-hour period. Call XM to confirm the activation of the radio.



Figure 2-4. Activation Request Sent Message

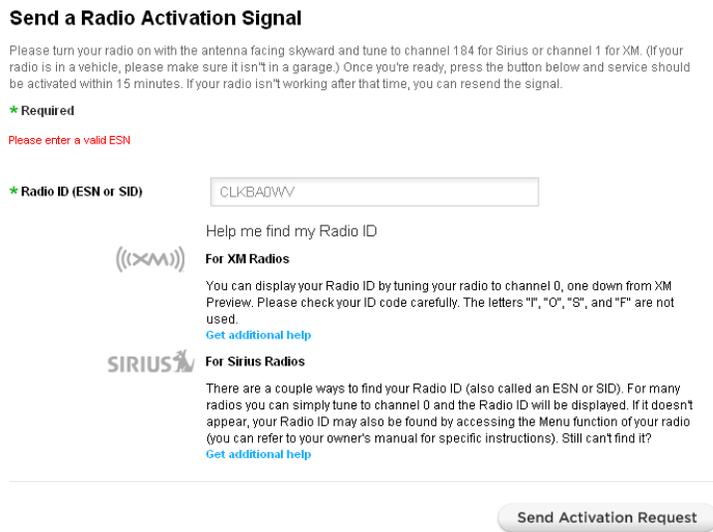


Figure 2-5. Webpage Failure Message

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 AT technical support.

2.3 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

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3 G1000/G900X/G950 – GDL 69 Series Activation

Prior to contacting XM, the GDU must be on and operational. For activation you will need your XM Radio IDs and your billing information. Your Radio IDs 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. The activation process 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/G900X/G950 to power up.
4. Rotate the outer **FMS** knob clockwise until the **AUX - TRIP PLANNING** page displays. See Figure 3-1.

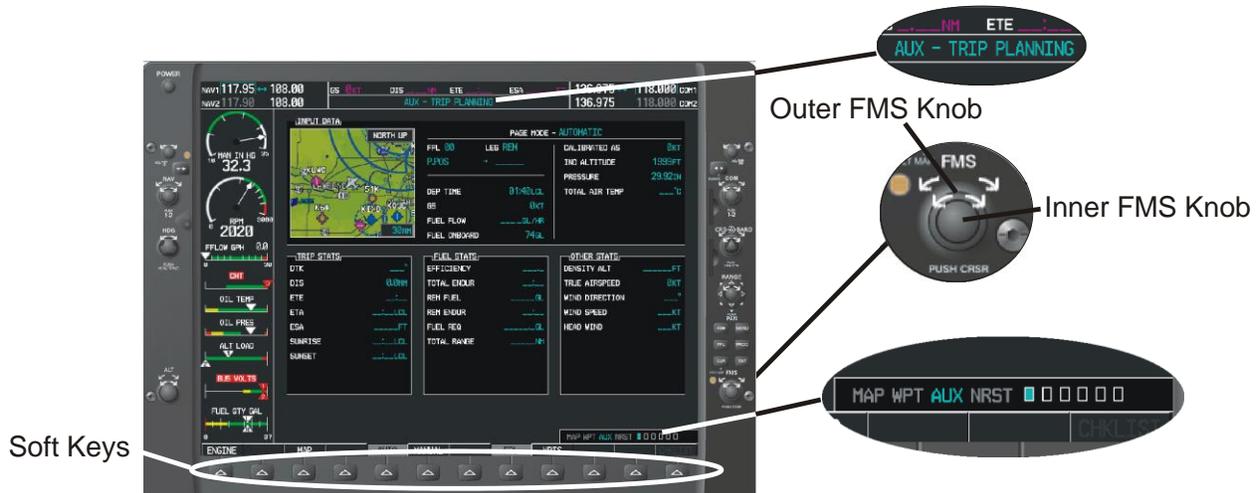


Figure 3-1. AUX - TRIP PLANNING Page

5. Rotate the inner **FMS** knob clockwise until the **AUX-XM INFORMATION** page is displayed. Press the **INFO** smart key to view your **Audio Radio ID** and **Data Radio ID**. See Figure 3-2 for these locations.
6. 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 green.

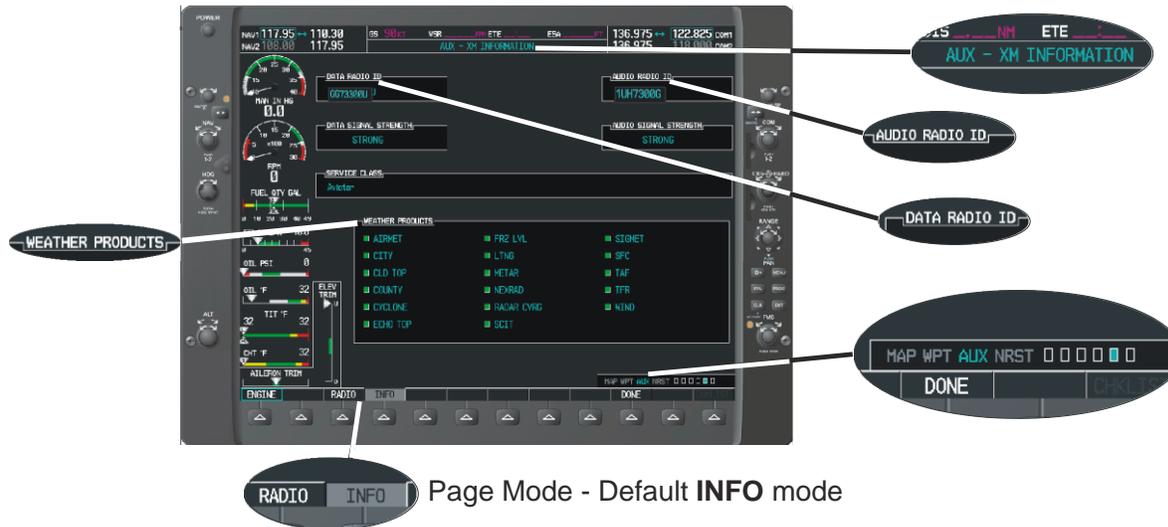


Figure 3-2. AUX-XM Information Page

3.1 Verify the Radios are Ready to be Activated

The **AUX - XM INFORMATION** page has two modes, Radio Information and Radio Operation. The page should default to **INFO** mode (if the radio is not activated). You will need to be on this page 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 the G1000/G900X/G950 will display the free-to-air channels, which are channel 0 (Radio ID) and channel 1 (XM Preview). If you can see the free-to-air channels and can hear 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/G900X/G950 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 (if applicable).

NOTE

Make sure to be specific for requesting a **DATA ONLY** service under the Data Radio ID and an **AUDIO ONLY** service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one 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. The activation process is not complete until a valid service class is shown. 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 **LOCK**. This will bring up a small inset window as shown in Figure 3-4. Press the **ENT** key lock in your activation.

NOTE



During the activation process do not change channels or pages during this time.

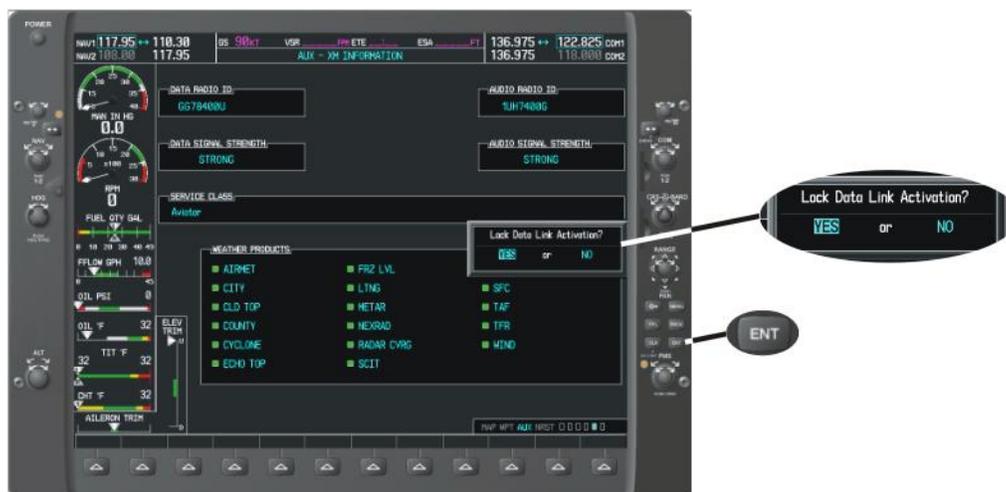


Figure 3-4. Lock Activation Screen

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. To see what products are available with your subscription level, see Table 3-1 or Table 3-2. 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

Table 3-1. G1000/G900X/G950 Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro* Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
City Forecasts	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
County Warnings	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
AIRMETs		✓	✓
SIGMETs		✓	✓
Echo Tops		✓	✓
Freezing Level		✓	✓
Severe Weather Storm Tracks		✓	✓
Surface Weather Maps		✓	✓
Satellite Mosaic		✓	✓
AIREPs		✓	✓
PIREPs		✓	✓
Turbulence			✓
Current Icing Product (CIP)			✓
Supercooled Large Droplets (SLD)			✓
Hurricane Track			✓

*Available for units that have V9.10 software or later.

Table 3-2. G1000/G900X/G950 Weather Products Available in Canada

Product	Aviator Subscription	Aviator Pro* Subscription
High Resolution NEXRAD Radar	✓	✓
Radar Coverage	✓	✓
METARs	✓	✓
TAFs	✓	✓
Canadian Weather Warnings	✓	✓
Winds Aloft (at altitude)	✓	✓
AIRMETs	✓	✓
SIGMETs	✓	✓
Surface Weather Maps	✓	✓
PIREPs	✓	✓

*Available for units that have V9.10 software or later.

3.4 Refreshing

If the unit is not activated after one hour a ‘refresh’ may be needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action 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’. If you still are having trouble, call Garmin technical support using the telephone numbers listed at the front of this guide.

3.5 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

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4 GNS 430/530 – GDL69/69H Activation

For activation you will need your XM Data Radio ID and your billing information. If your unit is a GDL 69A/69AH, which comes with a Data Radio ID and an Audio Radio ID, only the Data Radio ID is displayed on the GNS 430/530, 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. The activation process 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.

NOTE



Make sure to be specific for requesting a **DATA ONLY** service under the Data Radio ID and an **AUDIO ONLY** service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.

4.2 Verify Signal Reception

1. Access the GDL 69/69H 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.
6. Verify radio IDs and signal quality is between 2 – 3. If signal quality is zero, check the antenna and wiring.

Table 4-1. Data Link Status

SAT ID Field	
'- -'	GDL 69/69H – 430/530 Series interface communications not yet established.
'XM'	GDL 69/69H 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**. These services are available only in the United States. 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. Be sure that the unit is updated with the most current software.

4.3.1 Verify NEXRAD

To select the Weather Page from the Data Link Page:

1. Turn the **large outer knob** on the right and move through the Page Groups until the NAV Page Group is selected.
2. 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. If no weather is in the area, look for NEXRAD timer in the upper right corner to confirm delivery of NEXRAD.

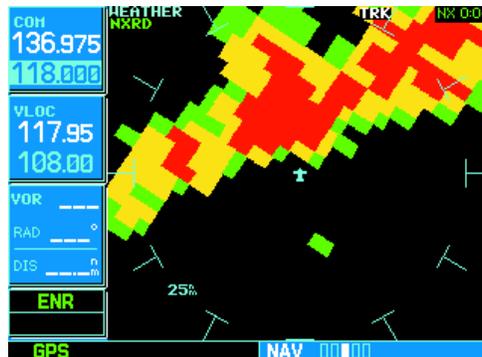


Figure 4-3. Weather Page

4.3.2 Verify Graphical METAR

To display Graphical METARs on the NAV Weather Page:

1. Select the NAV Weather Page.
2. 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. Turn the **larger outer knob** on the right and move through the Page Groups until the AUX Page Group is selected.
2. Turn the **small inner knob** on the right to the Data Link Page.
3. Press **PUSH CRSR** and turn **small inner knob** to highlight Request METAR, put in airport ID, then go back and select Textual METAR. Turn small knob and select airport from list. Press **ENT**. The airports are added to the list through the Request METAR page.
4. 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.

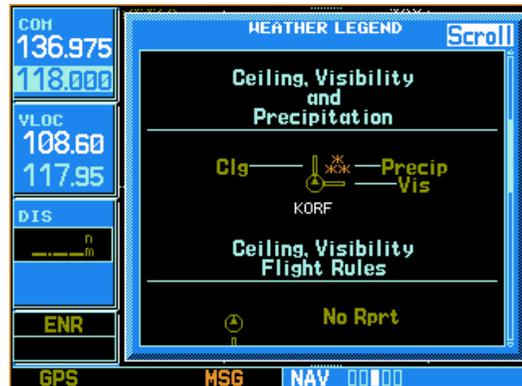


Figure 4-7. Temperature/Dewpoints Page

NOTE

For all 400/500 Series: After verifying that all weather products have been received, leave unit on for an additional 1.5 hours to allow subscription lock-in process to take place.

4.4 Refreshing

If the unit is not activated after 1.5 hours a 'refresh' maybe needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action 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 using the telephone numbers listed at the front of this guide.

4.5 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

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5 GNS 430W/530W – GDL 69 Series Activation

For activation of a GDL 69/69H you will need your XM Data Radio ID and your billing information, and for activation of a GDL 69A/69AH you will need your XM Data Radio ID, your Audio Radio ID and your billing information. Your Data and Audio Radio IDs can be found on the last page of this document and on the 430W/530W XM Information page (see Section 5.2 below).

5.1 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. The activation process 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 430W/530W to power up.
4. Call XM Satellite Radio 1.800.985.9200. The XM operator will ask you for your Data IDs.

NOTE



Make sure to be specific for requesting a DATA ONLY service under the Data Radio ID and an AUDIO ONLY service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.

5.2 Verify Signal Reception

1. Access the XM Information page. This page can be found by rotating the **outer knob** until the **AUX** menu page displays.
2. Rotate the inner knob until the **XM INFORMATION** page is displayed.



Figure 5-1. XM Information Page

3. If the GDL69 VER field displays “---“ then GDL 69 Series to GNS 430W/530W interface communications are not yet established. Check the GDL 69 Series power, RS-232 configuration, and/or wiring.
4. Verify DATA ID contains the eight character identification code.
5. Verify DATA SIGNAL quality is either “Weak” or “Strong”. If signal quality is “Antenna” or “None’, check the antenna and wiring.
6. If you have a GDL 69A/69AH, Verify Audio ID contains the eight character identification code. Then verify that AUDIO SIGNAL quality is either “Weak” or “Strong”. If signal quality is “Antenna” or “None’, check the antenna and wiring.
7. SERVICE CLASS will initially read “DETECTING ACTIVATION”. After the your activation request is completely processed by the XM activation system the service class field should change to the class that corresponds to the service level that you requested. This value will either be Aviation LT or Aviator.

For a list of weather products available for the service level you requested, see

Table 5-1.

8. When the correct Service Class is being displayed, press the MENU key, select the “Lock Data Link Activation” menu item by highlighting it and then press the ENT key. This locks your activation into the GDL 69 Series.

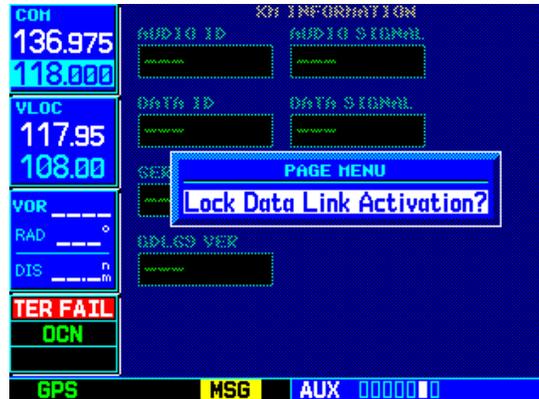


Figure 5-2. XM Information Page Menu

NOTE



For all 400W/500W Series, verify that all weather products have been received. Leave unit on for 1.5 hours to allow all weather products to be received. Do not change channels or pages during this time.

Table 5-1. GNS 430W/530W Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
Severe Weather Storm Tracks		✓	✓

5.2.1 Verify Textual METAR

To select the METARs Text Page:

1. Turn the **larger outer knob** on the right and move through the Page Groups until the WPT Page Group is selected.
2. Turn the **small inner knob** on the right to the Textual METAR page.
3. Press **PUSH CRSR** and turn **small inner knob** to enter airport ID.
4. 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 5-3. Textual METAR Page

5.3 Refreshing

If the unit is not activated after 1.5 hours a 'refresh' maybe needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action as explained in Section 2.2. When asked for the Radio ID number on the website, enter the ID number of the unit 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'. If you still are having trouble, call Garmin technical support using the telephone numbers listed at the front of this guide.

5.4 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

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6 GMX 200 - GDL 69 Series Activation

The GMX 200 must be correctly configured to accept information from the GDL 69 Series, in accordance with the GMX 200 Multi-Function Display Installation Manual, P/N 190-00607-04 (or later).

6.1 Activation Steps

1. **Make sure that the aircraft's XM antenna has an unobstructed view of the southern sky.**
It is highly recommended that the aircraft be outside of and away from the hangar.
2. **Hook up the aircraft to external power if available.**
The complete activation process may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. **Power on the avionics and allow the GMX 200 and the GDL 69 Series to power up.**
Do not power cycle the units during the activation process.
4. **Verify that the yellow “GDL 69” failure flag is not displayed.**
The absence of a failure flag confirms that the GMX 200 is communicating with the GDL 69 Series.
5. Go to the XM Activation Page
 - a) Press the **FN** key until the **FIS** function is displayed. Press the FIS smart key.
 - b) Press the fourth smart key until **STATUS** is displayed.
 - c) Press the **MENU/ENT** key.
 - d) 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.)
 - e) Press the line select key next to **Diagnostics**.
 - f) **Activation** will be displayed.
6. **To activate service, call XM at 1.800.985.9200.**
When activating the data service, specify Aviator LT, Aviator, or Aviator Pro. 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 LT, Aviator, or Aviator Pro) and **all** of the weather products for the class that you subscribed to are displayed, press the **Accept** smart key. Wait 10 to 30 seconds to allow the GDL 69 Series to process the accept command and lock in the activation. To see the available weather products for your subscription level see Table 6-1.

NOTE



Make sure to be specific for requesting a DATA ONLY service under the Data Radio ID and an AUDIO ONLY service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.

Table 6-1. GMX 200 Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
City Forecasts	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
County Warnings	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
AIRMETs		✓	✓
SIGMETs		✓	✓
Echo Tops		✓	✓
Freezing Level		✓	✓
Severe Weather Storm Tracks		✓	✓
Surface Weather Maps		✓	✓
Satellite Mosaic		✓	✓
Hurricane Track			✓



Figure 6-1. Data Radio ID and Audio Radio ID Locations



Figure 6-2. GMX 200 with Full Channel List

7. For GDL 69A/69AH 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 GMX 200.** This can be accomplished by pressing the **FN** key until **XM** is displayed. Press the **XM** smart key. A non-activated unit will display only channel 0 (Radio ID) and channel 1 (XM Preview). An activated unit will display the full list of XM channels. Tune to channel 1, while waiting for audio activation. Wait for the XM display to become populated with the XM channel list (see Figure 6-2 above for an example of what this looks like).
8. **Select an XM channel in order to lock in the radio activation.** Channels 0, 1 are free preview channels and should not be used for this procedure. Press either the Up or Down Arrow key and then press the SEL key to select a new channel. Wait for the channel to be displayed in the Active Channel box at the top of the XM display. The XM radio activation is complete when the channel is displayed.

6.2 Refreshing

If the unit is not activated after one hour a 'refresh' may be needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action 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'. If you still are having trouble, call Garmin AT technical support using the telephone numbers listed at the front of this guide.

6.3 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

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7 G500/G600 – GDL 69 Series Activation

Prior to contacting XM, the GDU must be on and operational. For activation you will need your XM Radio IDs and your billing information. Your Radio IDs 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. The activation process may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. Power on the avionics and allow the G500/G600 to power up.
4. Rotate the large **MFD** knob clockwise to the first page of the **AUX** group. Rotate the small **MFD** knob to the **XM Information** page. See Figure 7-1.

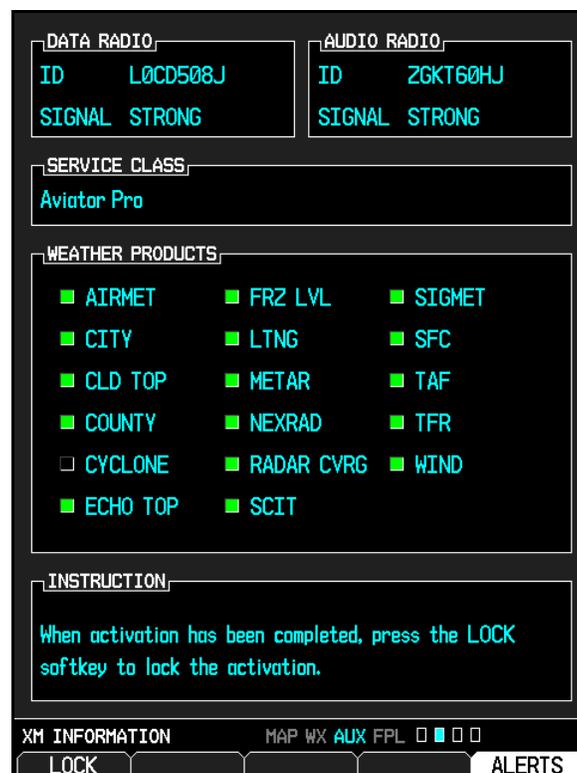


Figure 7-1. XM Information Page

5. A list of **Weather Products** will also be shown in the middle 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 green. To see the weather products available for each subscription level see Figure 7-1.

Table 7-1. G500/G600 Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
City Forecasts	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
County Warnings	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
AIRMETS		✓	✓
SIGMETs		✓	✓
Echo Tops		✓	✓
Freezing Level		✓	✓
Severe Weather Storm Tracks		✓	✓
Surface Weather Maps		✓	✓
Satellite Mosaic		✓	✓
Hurricane Track			✓

7.1 Verify the Radios are Ready to be Activated

If the radio is inactivated and working properly the G500/G600 will display the free-to-air channels, which are channel 0 (Radio ID) and channel 1 (XM Preview). If you can see the free-to-air channels and can hear channel 1, you are ready to activate your radios.

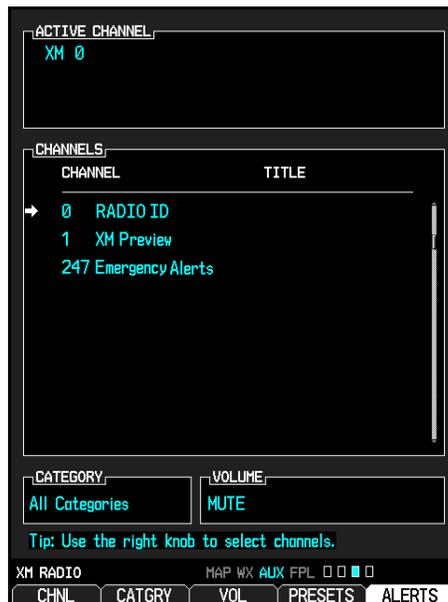


Figure 7-2. AUX – XM Radio Page

7.2 Activating the Radio

NOTE



Make sure to be specific for requesting a DATA ONLY service under the Data Radio ID and an AUDIO ONLY service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.

The G500/G600 will need to be on the **XM INFORMATION** page of the AUX Group when you call for activation.

Call 1.800.985.9200 and the XM operator will ask you for your XM Data IDs. Activation should begin once the XM operator has all your information. During activation the **XM Information** page will show the various Weather Products being activated. The activation process is not complete until a valid service class is shown. 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 **LOCK**. This will bring up a small inset window as shown in Figure 7-3. Rotate the small **MFD** knob to YES and press the **ENT** key lock in your activation.

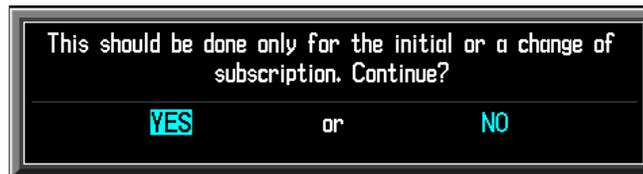


Figure 7-3. Lock Activation Screen

7.3 Verifying Subscribed Services

When the data radio (weather receiver) has been activated, the subscription level will be shown in the service class field. See Figure 7-1. Rotate the large **MFD** knob to the XM Radio page. Press the **CH-** and **CH+** soft key to verify that the channel changes. You should see a complete listing of all the channels of your subscription as shown in Figure 7-4.

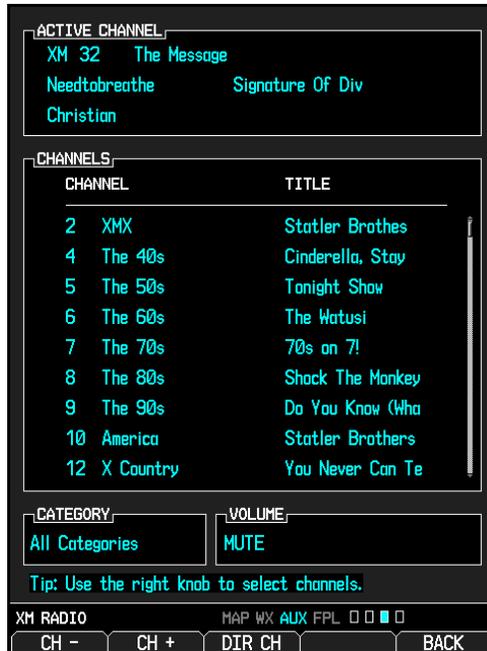


Figure 7-4. Channel Listings Screen

7.4 Refreshing

If the unit is not activated after one hour a ‘refresh’ may be needed. To accomplish this go to the website https://care.siriusxm.com/retailrefresh_view.action 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’. If you still are having trouble, call Garmin technical support using the telephone numbers listed at the front of this guide.

7.5 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin AT technical support personnel. Please contact Garmin AT technical support using the telephone numbers listed at the front of this guide.

8 GTN 625/635/650 and GTN 725/750 – GDL 69 Series Activation

Prior to contacting XM, the GTN 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 Radio IDs 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 GDL 69 Series Status page. 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. The activation process may take 45-60 minutes or more, depending on the demand on the XM activation system.
3. Power on the avionics and allow the GTN to power up in normal mode.
4. There are two ways to display the status and Radio IDs of the GDL 69 Series as shown in Figure 8-1. One way is by touching the 'Music' key on the Home page, followed by the 'Status' key. See Figure 8-2. The other way is by touching the 'System' key on the Home page, followed by the 'External LRUs' key and then the 'More Info' key. See Figure 8-3.



Figure 8-1. GDL 69 Series Unit Data and Audio Radio IDs on Status Page



Figure 8-2. Accessing GDL 69 Series Unit Status Screen using 'Music' Key



Figure 8-3. Accessing GDL 69 Series Unit Status Screen using 'System' Key

8.1 Verify the Radios are Ready to be Activated

If the radio is inactivated and working properly the GTN 725/750 will display the free-to-air channels, which are channel 0 (Radio ID) and channel 1 (XM Preview). If you can see the free-to-air channels and can hear channel 1, you are ready to activate your radios.

8.2 Activating the Radio

NOTE



Make sure to be specific for requesting a DATA ONLY service under the Data Radio ID and an AUDIO ONLY service under the Audio Radio ID. Most XM receivers in the market have both audio and data services under one ID. The GDL 69 Series will not function correctly with both an audio and a data service activated under one ID.

NOTE



During the activation process do not change channels or pages during this time.

The GTN will need to be on the GDL 69 or GDL 69A Unit Status page, as shown in Figure 8-1, when you call for activation. Call 1.800.985.9200 and the XM operator will ask you for your Data Radio and Audio Radio ID. Activation should begin once the XM operator has all your information. During activation the Weather Products section of the Status page will show the various weather products being activated. The activation process is not complete until a valid service class is shown. Once activation has been completed, verify that the Subscription Level and Weather Products shown are the services that you purchased. If you are satisfied that you received the product you requested, touch the ‘Menu’ key. This will bring up a small inset window as shown in Figure 8-4. Touch the ‘Lock Activation’ key to lock in your subscription.

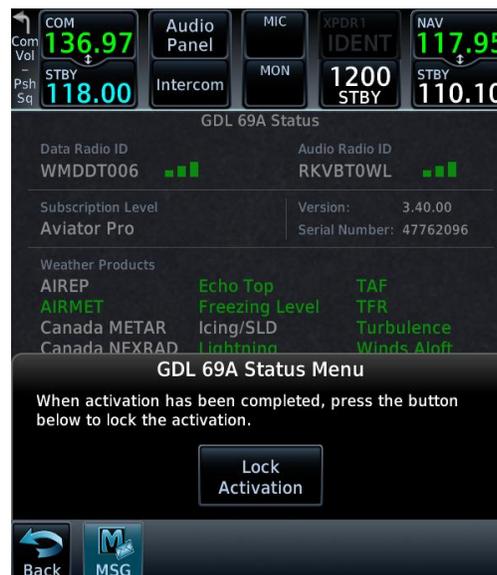


Figure 8-4. Lock Activation Page

8.3 Verifying Subscribed Services

When the weather receiver has been activated, the subscription level will be shown under Subscription Level. A list of weather products will be shown. The legend in the bottom right corner displays the status of the products. Products listed in green are products that are available. To see the weather products available for each subscription level, see Table 8-1.

8.4 Refreshing

If the unit is not activated after one hour a ‘refresh’ might be needed. To accomplish this, go to the website https://care.siriusxm.com/retailrefresh_view.action 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’. If you still are having trouble, call Garmin AT technical support using the telephone numbers listed at the front of this guide.



Figure 8-5. Channel Listing Screen

Table 8-1. GTN 625/635/650 and GTN 725/750 Weather Products Available in United States

Product	Aviator Lite (Aviator LT) Subscription	Aviator Subscription	Aviator Pro Subscription
High Resolution NEXRAD Radar	✓	✓	✓
Radar Coverage	✓	✓	✓
Precipitation Type (at surface)	✓	✓	✓
City Forecasts	✓	✓	✓
TFRs	✓	✓	✓
METARs	✓	✓	✓
TAFs	✓	✓	✓
County Warnings	✓	✓	✓
Winds Aloft (at altitude)		✓	✓
Lightning		✓	✓
AIRMETs		✓	✓
SIGMETs		✓	✓
Echo Tops		✓	✓
Freezing Level		✓	✓
Severe Weather Storm Tracks		✓	✓
Surface Analysis Weather Maps		✓	✓
Satellite Mosaic		✓	✓
AIREPs		✓	✓
PIREPs		✓	✓
SPC Aviation Weather Watches		✓	✓
Turbulence			✓
Current Icing Product (CIP)			✓
Supercooled Large Droplets (SLD)			✓
SPC Day One Convective Outlook			✓
SPC Mesoscale Discussions			✓
Visibility			✓
Hurricane Track			✓

8.5 Deactivating and Reactivating the GDL 69 Series

When the GDL 69 Series is not properly activated, in some cases it may be necessary to perform a full deactivation and reactivation of the system in order to make it work properly. This procedure is complicated and should never be attempted without the guidance of Garmin technical support personnel. Please contact Garmin technical support using the telephone numbers listed at the front of this guide.

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IMPORTANT!

**CONTAINS GDL 69 SERIES
INFORMATION
REQUIRED FOR XM SATELLITE RADIO
ACTIVATION**

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

IMPORTANT!

**CONTAINS GDL 69 SERIES
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