

GARMIN DATA LINK SYSTEM - DESCRIPTION AND OPERATION**1. General**

- A. The Garmin Data Link System (GDL) 69A XM and/or the GDL 69A SXM is a remote-mounted component of the Garmin G1000/G1000 NXi avionics system. The GDL system gives weather and flight data to the pilot/copilot and displays on both PFD's and/or the MFD, this unit receives signals from the S-band frequency range to provide continuous uplink capabilities at any altitude through North America and communicates with the G1000 avionics system through the high speed data bus to PFD 2 and sends audio signals to the GMA audio system.
- (1) For the removal and installation procedures for the GPS/XM antenna refer to Global Positioning System (GPS)/XM Antenna - Removal/Installation.
- B. The G1000 Integrated Avionics System uses different slightly different GPS/XM LRU's based on Airplane Software/Configuration. Make sure to read each section carefully, each software configuration uses some variants of Garmin LRU's which are NOT interchangeable between software versions. Become familiar with the installed software version, refer to Chapter 34, G1000 Integrated Avionics System - Description and Operation. The procedures in this section are typical for the G1000 v.767.XX Family and the G1000 NXi software configuration unless otherwise noted in this document.
- (1) The G1000 Software Version v.767.XX uses the GDL 69A XM System.
- (2) The G1000 NXi Software uses the GDL 69A SXM System.
- C. With a current subscription, XM satellite radio service is available with the GDL69A. XM and the GDL 69A SXM. The signals that the data link receives from satellites give better coverage than land-based transmissions. Analog audio is sent to the audio panel and shares the AUX music input with the external audio entertainment input.
- D. The XM radio is tuned through the MFD, or if installed with the XM GTR 10 Wireless Remote System. The XM GTR 10 Wireless Remote System components include a remote control to select entertainment audio from the GDL-69A. The remote is configured to the GTR 10 transceiver installed on the airplane. The remote can only be used for that airplane's wireless remote system installation. For more data applicable to the remote system refer to Chapter 23 XM GTR 10 Wireless Remote System - Description And Operation.

NOTE: The XM remote control only interfaces with the GDL 69A XM unit.

- E. For an overview of the GDL 69A System (Refer to Figure 1).

2. The GDL 69A XM and GDL 69 SXM Functions are typical unless otherwise noted.

- A. The GDL-69A supplies the functions that follow:
- Graphical NEXRAD Data (NEXRAD)
 - Graphical METAR Data (METAR)
 - Textual METAR Data
 - Textual Terminal Aerodrome Forecasts (TAF)
 - City Forecast Data
 - Graphical Wind Data (WIND)
 - Graphical Echo Tops (ECHO TOP)
 - Graphical Cloud Tops (CLD TOP)
 - Graphical Lightning Strikes (XM LTNG)
 - Graphical Storm Cell Movement (CELL MOV)
 - NEXRAD Radar Coverage (displayed with NEXRAD data)
 - SIGMETs/AIRMETs (SIG/AIR)
 - Surface Analysis with City Forecasts (SFC)
 - County Warnings (COUNTY)
 - Cloud to Cloud and Cloud to Ground Lightning, GDL 69 SXM only.
 - Freezing Levels (FRX LVL)
 - Hurricane Track (CYCLONE)
 - Temporary Flight Restrictions (TFR).

Figure 1 : Sheet 1 : Garmin Data Link System

