MANDATORY SERVICE BULLETIN

MSB 50-003/7

SUPERSEDES MSB 50-003/6

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type:	DA 50 C
Serial Numbers:	50.002, 50.003, 50.006 50.C.A.A.007 and subsequent, 50.C.Q.A.001 and subsequent

I.3 Time of Compliance

At next scheduled maintenance action.

Note: Prior compliance with MSB 50-003 through MSB 50-003/6 does not constitute compliance with this MSB.

I.4 Subject

Software for Garmin G1000 NXi; approved software systems, manifests and configurations.

I.5 Reason

Summary of approved software systems, manifests and configurations for Garmin G1000 NXi.

I.6 Concurrent Documents

Garmin G1000 NXi Line Maintenance Manual, 190-02631-00, latest effective issue.

I.7 Approval

The technical information or instructions contained in this document relate to the Design Change Advisory No. VÄM 50-002, OÄM 50-001, OÄM 50-003, OÄM 50-004, OÄM 50-006 through OÄM 50-010, OÄM 50-011, OÄM 50-013, OÄM 50-018, OÄM 50-027/a, OÄM 50-031, OÄM 50-032, OÄM 50-050, MÄM 50-115, MÄM 50-140, MÄM 50-221 and MÄM 50-514 which have been approved under the authority of EASA Design Organization Approval ref. EASA.21J.052 or by EASA.

The technical content of this document has been approved under the authority of DOA ref. EASA.21J.052.

I.8 Accomplishment/Instructions

Compare installed software system and related manifests with approved ones stated in this service bulletin.

If installed software system and related manifests are not approved, perform an update to the latest approved software version according to the instructions given in the G1000 NXi Line Maintenance Manual, latest effective issue or other related Garmin documents, or WI-MSB 50-003, latest effective issue.
An update to a later approved software system with the related manifest may be carried out on every aircraft. Perform the update according to the instructions given in the G1000 NXi Line Maintenance Manual, latest effective issue or other related Garmin documents, or WI-MSB 50-003, latest effective issue.

NOTE: Changing the software system requires new configuration of the system. Refer to the Garmin documentation for software configuration.

NOTE: Determine what optional equipment (i.e. ADF, DME, WX500, etc.) is installed in the airplane before loading software.
Determine what optional features (i.e. Synthetic Vision (SVT), Jeppesen ChartView, etc.) are installed before loading the AIRFRAME configuration file. If the AIRFRAME configuration file is loaded from the system software card, you will need to unlock the optional features using their unlock cards. Make sure that all of the required materials and equipment are on hand before you begin the upgrade procedure.

Software Part Number	Software Version	Software Name	Remarks
System			This software version supports • the GFC700 autopilot system.
010-02576-02	v2576.02		
Manifest			
006-B0224-01	V2.05	GMU System	
006-B0398-46	V3.56	GSA8X System	
006-B0742-12	V3.10	GCU / GMC System	
006-B1177-7Y	V21.60	GDU System	
006-B1607-0K	V2.60	GTX 3X5 System	
006-B1797-16	V3.21	GTX 3X5 / ADS-B	
006-B1827-22	V8.2	GPS/WAAS System	
006-B1838-09	V2.09	GRS 79 System	
006-B1838-58	V2.08	GDC 72 System	
006-B2139-09	V2.60	GEA System	
006-B2210-1N	V5.31D	GMA AUX System	
006-B2212-1N	V5.31D	GMA System	
006-B2253-01	V2.01	NAV System	
006-B2371-02	V2.02	COM System	
006-B2548-19	V2.1B	GIA System	
006-B2679-00	V2.00	GMU44B System	
006-C0048-00	V2.00	GMU FPGA	
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-C0164-01	V1.10	GIA FPGA	
006-C0175-09	V1.46	GMA AUX FPGA	
006-D0425-2A	V4.10	GIA Audio	
006-D3034-B1	V5.00D	GMA AUX Region List	
006-D3034-C2	V5.21	GMA Audio Database	
006-D3035-B2	V5.00D	GMA Display Key Region	
006-D3035-CU	V5.15D	GMA Region List	
006-D3035-G6	V5.28D	GMA Audio Config	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D5761-00	V2.00	NAV Region List	

Software Part Number	Software Version	Software Name	Remarks
006-D6318-04	V2.21	GIA Region List	
006-D6358-01	V2.30	GEA Region List	
006-D6512-00	V2.00	COM Region List	
006-D9378-00	V2.00	GFC Cert GIA AFCS Gains	

Software Part Number	Software Version	Software Name	Remarks
System			This software version supports • De-Icing System including propeller de-icing • GMU44B magneto-meter • Intake Air Temperature Caution & Warning • Glow Fail Caution • checklist files in *.gcl format • GDL69A SXM Datalink receiver • GTS800 Traffic Advisory System
010-02576-03	v2576.03		
Manifest			
006-B0224-01	V2.05	GMU System	
006-B0398-46	V3.56	GSA8X System	
006-B0551-35	V4.13	GTS8XX System	
006-B0742-12	V3.10	GCU / GMC System	
006-B1177-C3	V21.65.1	GDU System	
006-B1607-0K	V2.60	GTX 3X5 System	
006-B1797-16	V3.21	GTX 3X5 / ADS-B	
006-B1827-22	V8.2	GPS/WAAS System	
006-B1838-09	V2.09	GRS 79 System	
006-B1838-58	V2.08	GDC 72 System	
006-B1902-0B	V5.51	GDL 69e System	
006-B2139-09	V2.60	GEA System	
006-B2181-30	V3.00	GDL 69e XM FW/XM Firmware	
006-B2210-1N	V5.31D	GMA AUX System	
006-B2212-1N	V5.31D	GMA System	
006-B2253-01	V2.01	NAV System	
006-B2371-02	V2.02	COM System	
006-B2548-1K	V2.1E	GIA System	
006-B2679-00	V2.00	GMU44B System	
006-C0048-00	V2.00	GMU FPGA	
006-C0081-20	V2.0	GTS8XX FPGA	

Software Part Number	Software Version	Software Name	Remarks
006-C0153-22	V2.20	GTX 3X5 FPGA	
006-C0157-21	V2.10	GTX 3X5 / ADS-B FPGA	
006-C0164-01	V1.10	GIA FPGA	
006-C0175-09	V1.46	GMA AUX FPGA	
006-D0425-2A	V4.10	GIA Audio	
006-D0725-02	V4.00	GTS8XX Region List	
006-D3034-B1	V5.00D	GMA AUX Region List	
006-D3034-B2	V5.00D	GMA AUX Key Region	
006-D3034-C2	V5.21	GMA Audio Database	
006-D3035-B2	V5.00D	GMA Display Key Region	
006-D3035-CU	V5.15D	GMA Region List	
006-D3035-HE	V5.29D	GMA Audio Config	
006-D5080-00	V2.00	GRS 79 Region List	
006-D5080-50	V2.00	GDC 72 Region List	
006-D5402-02	V1.10	GDL 69e App Package	
006-D5761-00	V2.00	NAV Region List	
006-D6318-04	V2.21	GIA Region List	
006-D6358-01	V2.30	GEA Region List	
006-D6512-00	V2.00	COM Region List	
006-D6994-00	V2.00	GMU44B Region List	
006-D9378-00	V2.00	GFC Cert GIA AFCS Gains	

Approved Configurations (Software)	Remarks
NOTE: Even though more options may be included in the software loader card, only those shown below are currently approved for installation.	
DA50 Option – ADF	Install if an ADF is installed in the airplane (OÄM 50-003)
DA50 Option – Deicing	Install if the de-icing system is installed in the airplane (OÄM 50-011)
DA50 Option – DME	Install if a DME is installed in the airplane (OÄM 50-004)
DA50 Option – Fuel Tanks: Fuel calibration[*1)]	Refer to Note 1 below.
DA50 Option – Fuel Tanks: Pre-calibrated[*1)]	
DA50 Option – GCU 476	Install if a Garmin Control Unit GCU 476 is installed in the airplane (OÄM 50-018).

Approved Configurations (Software)	Remarks
DA50 Option – GDL69A SXM	Install if a Garmin Datalink Receiver GDL69A SXM is installed in the airplane (OÄM 50-027/a).
DA50 Option – Flightstream 510 Enable	Install if a FS 510 is installed in the airplane (OÄM 50-032).
DA50 Option – GFC700 with ESP and USP	Install if GFC 700 Autopilot System is installed in the airplane; NOTE: an additional unlock card is required.
DA50 Option – GSR56	Install if a Satellite Transceiver GSR56 is installed in the airplane (OÄM 50-010)
DA50 Option – GSR56 Voice/Text Only	Optional to “DA50 Option – GSR56” above: Install if a Satellite Transceiver GSR56 is installed in the airplane (OÄM 50-010).
DA50 Option – GTS 800	Install if a Garmin Traffic Advisory System GTS800 (OÄM 50-050) is installed in the airplane.
DA50 Option – GTX 345 Option	Install if a GTX 345 transponder is installed in the airplane.
DA50 Option – GTS 345 and GTS 800	Install if a GTX 345 transponder and Garmin Traffic Advisory System GTS 800 (OÄM 50-050) is installed in the airplane.
DA50 Option – GTX 345 and TAS600	Install if a GTX 345 transponder and Avidyne Traffic Advisory System TAS6xx (OÄM 50-006) is installed in the airplane.
DA50 Option – Aerox Oxygen Pressure[2*)]	Install if an Oxygen System with aerox pressure sensor is installed in the airplane (OÄM 50-001).
DA50 Option – ADZ Nagano Oxygen Pressure[2*)]	Install if an Oxygen System with ADZ Nagano pressure sensor is installed in the airplane (OÄM 50-001).
DA50 Option – Propeller Deicing	Install if the propeller de-icing system is installed in the airplane (OÄM 50-011)
DA50 Option – TAS600 Series Installation	Install if a Traffic Advisory System is installed in the airplane (OÄM 50-006).
DA50 Option – WX500	Install if a Stormscope WX500 is installed in the airplane (OÄM 50-013).

1*) This two options are not required to be installed. If either one is installed, the steps below have to be followed.

- "Fuel Tanks: Fuel calibration" requires manual calibration of the fuel quantity indicators. For calibration, refer to Work Instruction WI-MSB 50-003, latest effective issue.
- "Fuel Tanks: Pre-calibrated" uses pre-defined frequency values of the fuel probes for the fuel quantity indication.

2*) Refer to Airplane Flight Manual Doc. No. 9.01.01-E section 06-10 Equipment List to determine the installed pressure transducer.

Approved Magnetic Field Charts (GRS1 MV DB)		
Software Part Number	**Approved Version**	**Remarks**
006-D2658-01	V2015.00	
006-D2658-02	V2020.00	

I.9 Mass (Weight) and CG

n. a.

II PLANNING INFORMATION

II.1 Material & Availability

Quantity	Part Number	Description
1	010-02576-02 010-02576-03	G1000 NXi Software Loader Card (Diamond DA50)

The required Garmin G1000 NXi Cockpit Reference Guide (CRG) and Pilot´s Guide (PG) are referenced to the System Software Version number. The System Software Version number is displayed at the top right side of the MFD Power-up page.

System Software Version	Cockpit Reference Guide	Pilot´s Guide
2576.02	P/N 190-02800-00, Rev. B or later appropriate revision	P/N 190-02799-00, Rev. B or later appropriate revision
2576.03	P/N 190-02800-01, Rev. A or later appropriate revision	P/N 190-02799-01, Rev. A or later appropriate revision

Software and concurrent documents can be obtained through your Garmin distributor.

II.2 Special Tools

n. a.

II.3 Labor effort

Approx. 1 hour

II.4 Credit

None.

II.5 Reference Documents

None.

III REMARKS

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. Completion of all work must be recorded in the log book.
3. In case of any doubt contact Diamond Aircraft Industries GmbH.
4. The content of this MSB is mandatory in accordance with EASA TCDS EASA.A.639.

WORK INSTRUCTION

WI-MSB 50-003

Installation of G1000 NXi System Software 010-02576-03

I GENERAL INFORMATION

I.1 Subject

This work instruction announces the installation of G1000 NXi System Software Version P/N 010-02576-03.

I.2 Reference Documents

Diamond Aircraft DA 50 C Airplane Maintenance Manual, Doc. No. 9.02.01, latest effective issue.

Garmin G1000 NXi Line Maintenance Manual, P/N 190-02631-00, latest effective issue.

I.3 Remarks

a) All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.

b) All work, in particular if not described in this work instruction, must be done in accordance with the referenced maintenance manual.

c) For conversion factors between SI units and US/Imperial units refer to AMM Chapter 02.

d) In case of doubt, contact Diamond Aircraft Industries GmbH.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

II.3 Material

Quantity	Part Number	Description
1	010-02576-03	G1000 NXi Software Loader Card (Diamond DA50)

Material is available from Diamond Aircraft Industries or Garmin.

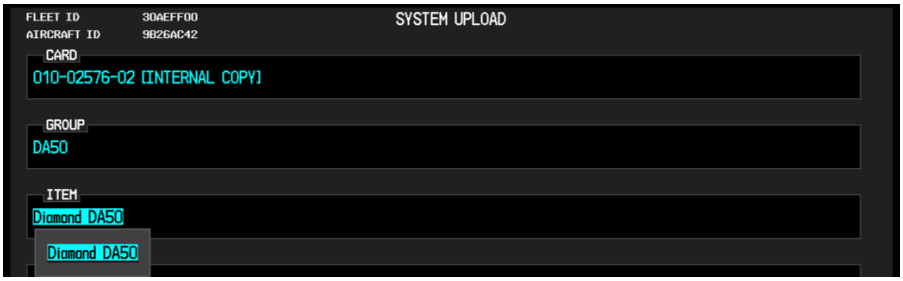
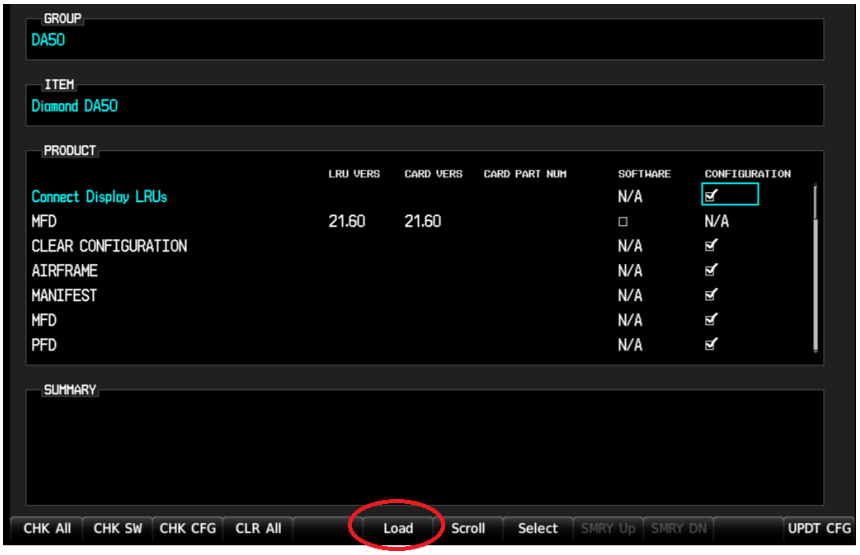
III INSTRUCTIONS

1	These instructions present field upgrade procedures for the G1000 NXi System Software 010-02576-03 for the DA 50 C. These instructions must be followed step-by-step in order and completely, to upgrade an existing approved configuration of the system software to a newer approved configuration. It is assumed that the person performing the upgrade is familiar with the aircraft and has a good working knowledge of the Garmin G1000 NXi System. NOTE All G1000 NXi screen shots used in this document are intended to provide visual reference only. All information depicted in screen shots, including software file names, versions and part numbers, is subject to change and may not be up to date.
2	In the aircraft, turn the aircraft ELECT. MASTER switch on.
3	Look at the MFD power-up screen (see following figure). In the upper right corner, the display shows ‘Diamond DA50, System XXXX.XX’. 

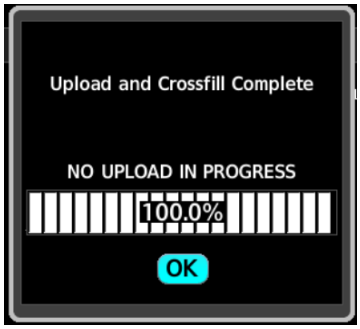
4	This 'System' number is the System Software Version. It correlates to the G1000 NXi, DA50 System Loader Card. For example: **EXAMPLE:** System Software Version '**2576.03**' = Loader Image P/N 010-**2576-03**
5	If the System Software Version is already at 2576.03, this Software Service Bulletin may have already been performed. Verify that steps 57 through 66 have been performed and proceed to the Testing Procedure at the end of this bulletin.
6	Turn the aircraft ELECT. MASTER switch off.
	NOTE Performing the software update described in this bulletin will delete all stored Pilot Profiles, user waypoints, stored flight plans, and map settings from memory.
Software Load Preparation	
7	Determine which optional equipment (i.e. ADF, DME, WX500, etc.) is installed in the airplane before loading software. Determine what optional features (i.e. Synthetic Vision (SVT), Jeppesen ChartView, etc.) are installed before loading the AIRFRAME configuration file. If the AIRFRAME configuration file is loaded from the system software card, you will need to unlock the optional features using their unlock cards. Make sure that all of the required materials and equipment are on hand before you begin the upgrade procedure. • Software Loader Card • Chart View Unlock Card (optional OÄM 50-007) • SVS Unlock Card (optional, OÄM 50-008) • Enhanced AFCS Unlock Card (OÄM 50-009)
8	While performing this procedure ensure the airplane is connected to and drawing power from a power cart. A loss of power during this procedure may result in a defective GIA.
9	Disengage (pull) the MFD and PFD circuit breakers.
10	Turn on the ELECT. MASTER switch.
11	Turn on the AV MASTER switch.
12	Turn on the ground power unit.
13	While holding the ENT key on the MFD, engage the MFD circuit breaker.
14	When the words appear INITIALIZING SYSTEM in the upper left corner of the MFD, release the ENT key.
15	Repeat steps 13 and 14 for the PFD.

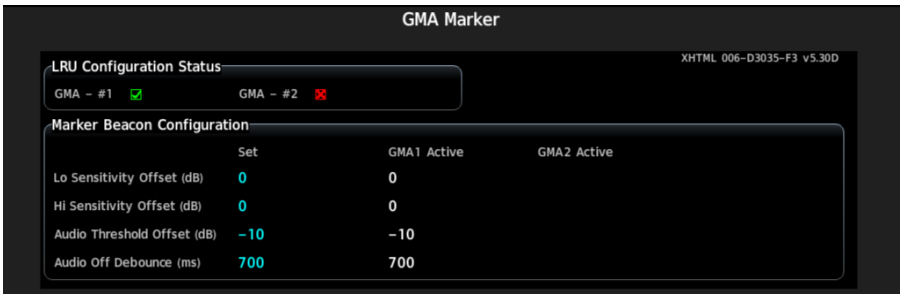
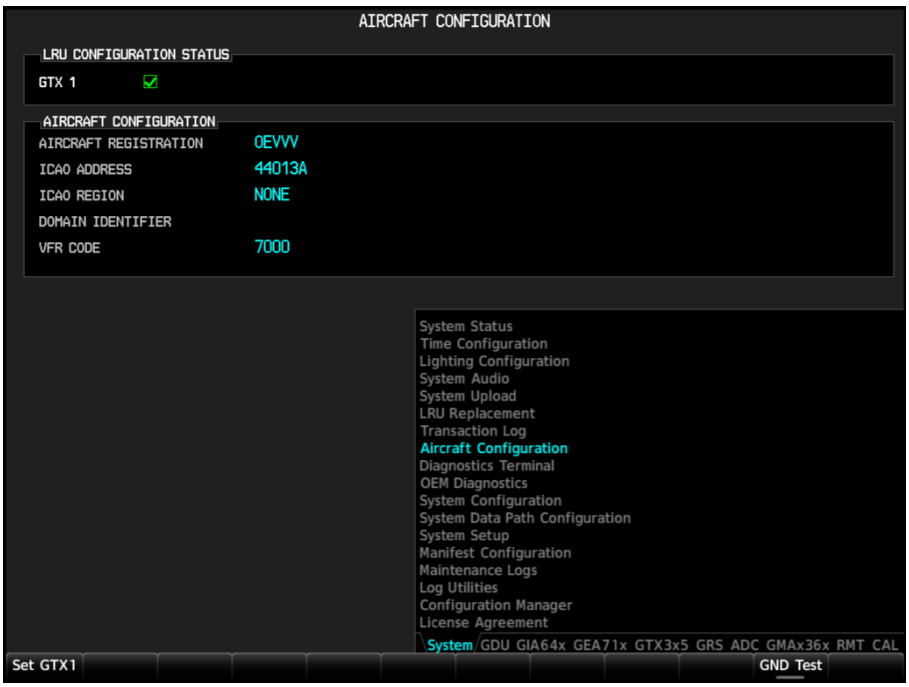
16	While in configuration mode write down the following configuration settings: **Aircraft Configuration** Aircraft Registration: _____ ICAO Address: _____ ICAO Region: _____ Domain Identifier: _____ VFR Code: _____ **Transponder Airframe Configuration** 1090 ES Out Control: _____ 1090 ES In Capable: _____ UAT In Capable: _____ EHS Support: _____ Allow Flight ID Entry: _____ Default Flight ID: _____ **Audio Panel Configuration (GMA Marker page)** Marker Beacon Lo Sensitivity Offset (dB): _____ Marker Beacon Hi Sensitivity Offset (dB): _____
MFD and PFD Software Load:	
17	Disengage (pull) the MFD and PFD circuit breakers.
18	Insert the G1000 NXi Software Loader Card into the MFD top card slot.
19	While holding the ENT key on the MFD, engage the MFD circuit breaker.
20	When the words appear INITIALIZING SYSTEM in the upper left corner of the MFD, release the ENT key.
21	Press the ENT key to acknowledge the following prompt (NOTE: A softkey labeled 'YES' appears in the lower right corner and may be used instead of the ENT key): DO YOU WANT TO UPDATE SYSTEM FILES? NO WILL BE ASSUMED IN 30 SECONDS.
22	The following screen is displayed. DO YOU WANT TO UPDATE SYSTEM FILES? NO WILL BE ASSUMED IN 20 SECONDS. UPDATING SYSTEM FILES, PLEASE WAIT.

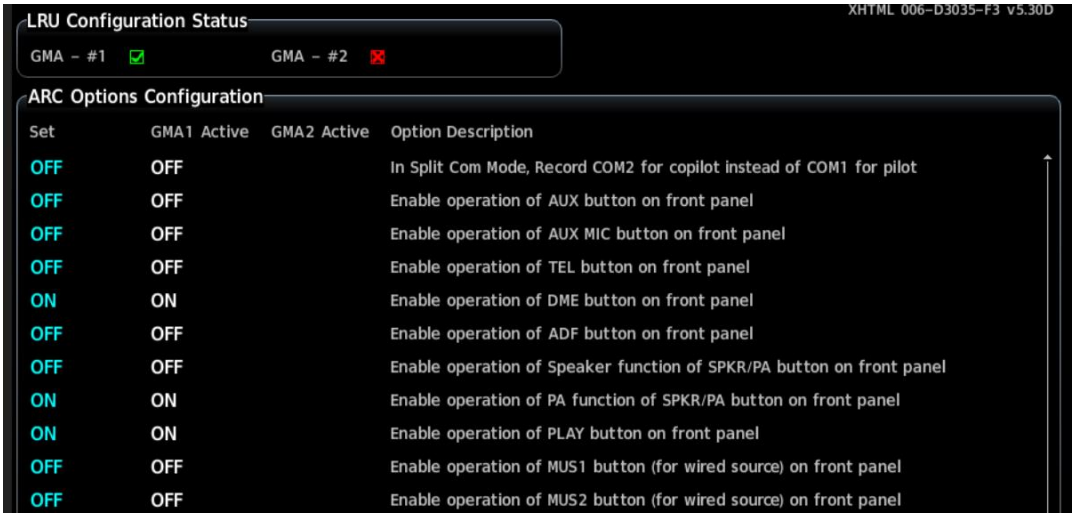
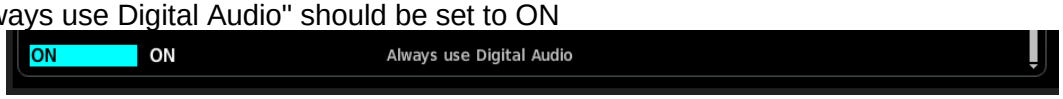
23	When the “DO YOU WANT TO UPDATE SPLASHSCREEN” prompt appears, press the YES softkey.
24	Press any key to confirm update completion after the splash screen has finished loading.
25	If a message appears about verifying the databases, press any key to continue.
26	New software is loaded to the MFD. When complete, the MFD starts in configuration mode.
27	Pull the MFD circuit breaker.
28	Remove the G1000 NXi Loader Card from the MFD and insert it into the top card slot on the PFD.
29	While holding the ENT key on the PFD, engage the PFD circuit breaker.
30	When the words appear INITIALIZING SYSTEM in the upper left corner of the PFD, release the ENT key.
31	Press the ENT key to acknowledge the following prompt (NOTE: A softkey labeled ‘YES’ appears in the lower right corner and may be used in lieu of the ENT key): DO YOU WANT TO UPDATE SYSTEM FILES? NO WILL BE ASSUMED IN 30 SECONDS.
32	The following screen is displayed. DO YOU WANT TO UPDATE SYSTEM FILES? NO WILL BE ASSUMED IN 20 SECONDS. UPDATING SYSTEM FILES, PLEASE WAIT.
33	When the “DO YOU WANT TO UPDATE SPLASHSCREEN” prompt appears, press the YES softkey.
34	Press any key to confirm update completion after the splash screen has finished loading.
35	If a message appears about verifying the databases, press any key to continue.
36	New software is loaded to the PFD. When complete, the PFD starts in configuration mode. Do not remove power.
37	Start the MFD in configuration mode by pressing the ENT key and engaging the MFD circuit breaker. NOTE For the rest of the software/configuration procedure, do not operate the MFD while loading software or configuration files unless specifically instructed to do so. A failed or cancelled load may result.

Initial G1000 NXi Software and Configuration Upload:	
38	Using the PFD, go to the SYSTEM UPLOAD page using the FMS knob.
39	Activate the cursor and highlight the GROUP field.
40	Using the FMS knob select DA50.
41	Press the ENT key.
42	Using the FMS knob select Diamond DA50 in the ITEM field 
43	Press the ENT key.
44	Press the LOAD softkey to begin the software and configuration loading process. 
45	Monitor the status of the upload process.

46	Once all files have been successfully loaded, press the ENT key to acknowledge the Upload Complete prompt. 
Optional Equipment:	
47	If the airplane is equipped with any of the following optional equipment, perform the procedure below to load software and configuration files. If the DA 50 C is not equipped with any of the following options (except "Fuel Tanks"), proceed to Step 57 of this bulletin. Even though more options may be included in the software loader card, only those shown in the MSB 50-003, latest effective issue are currently approved for installation. • DA50 Option – ADF • DA50 Option – Deicing • DA50 Option – DME • DA50 Option – Fuel Tanks: Fuel calibration[1*)] • DA50 Option – Fuel Tanks: Pre-calibrated[1*)] • DA50 Option – GCU 476 • DA50 Option – GDL69A SXM • DA50 Option – Flightstream 510 Enable • DA50 Option – GFC 700 with ESP and USP • DA50 Option – GSR 56 • DA50 Option – GSR 56 Voice/Text Only • DA50 Option – GTS 800 • DA50 Option – GTX 345 Option • DA50 Option – GTX 345 and GTS 800 • DA50 Option – GTX 345 and TAS 600 • DA50 Option – Aerox Oxygen Pressure[2*)] • DA50 Option – ADZ Nagano Pressure[2*)] • DA50 Option – Propeller Deicing • DA50 Option – TAS600 Series Installation • DA50 Option – WX500 1*) This two options are not required to be installed. If either one is installed, the steps below have to be followed. • "Fuel Tanks: Fuel calibration" requires manual calibration of the fuel quantity indicators. Recommended option. For calibration, refer to Step 67 of this bulletin. • "Fuel Tanks: Pre-calibrated" uses pre-defined frequency values of the fuel probes for the fuel quantity indication. A check of the fuel quantity indicators is required if this option is loaded. 2*) Refer to Airplane Flight Manual Doc. No. 9.01.01-E section 06-10 Equipment List to determine the installed pressure transducer.

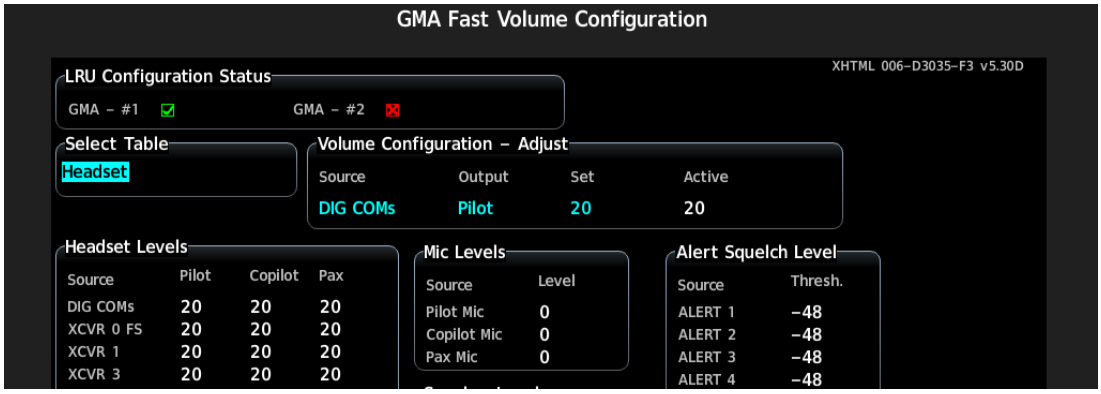
Loading Optional Equipment Software and Configuration Files:	
48	If not already there, go to the SYSTEM UPLOAD page using the FMS knob.
49	Activate the cursor and highlight the GROUP field.
50	Using the FMS knob select DA 50 C Options.
51	Press the ENT key.
52	Using the FMS knob select the appropriate option and press the ENT key. 
53	Press the LOAD softkey, to begin the software and configuration loading process.
54	Press the ENT key to acknowledge the Upload Complete prompt. 
55	View the SUMMARY field and ensure that all items are “COMPLETED”.
56	Repeat steps 52 through 55 to load any other equipped options.

57	Re-enter the configuration settings of the Audio Panel into the Set column as noted in Step 16 of this bulletin and press the "Set>GMA 1" softkey. 
58	Enter the Aircraft Registration, ICAO Address and VFR Code on the Aircraft Configuration Page. Press the "Set GTX1" softkey after the data entry. If the airplane is equipped with a GTS 800, also press the "Set GTS" softkey. 

59	Re-enter the configuration settings of the Transponder as noted in Step 16 of this bulletin. 
60	Verify/Set following settings on the GMA Options page.  TEL button should be set to ON if a GSR56 Satellite Transceiver is installed. DME button should be set to ON if a DME is installed. ADF button should be set to ON is an ADF is installed. "Always use Digital Audio" should be set to ON 

61 On the "GMA Fast Volume Configuration" page change the settings of the Headset Levels to the settings below. All others must not be changed.

Source	Pilot	Copilot	Pax
DIG COMs	20	20	20
XCVR 0 FS	20	20	20
XCVR 1	20	20	20
XCVR 3	20	20	20



62 If the airplane is equipped with a GTS 800, enter following settings on the GTS Configuration page

TOP ANTENNA	GARMIN GA58
TOP ANT CBL LOSS	2.7dB
BOTTOM ANTENNA	GARMIN GA58
BOT ANT CBL LOSS	2.5dB
ICAO ADDRESS	specific to airplane
VOLUME	-10dB
VOICE	FEMALE
ADS-B TX	INSTALLED*)
LANDING GEAR	RETRACTABLE

*) NOT INSTALLED if GTX345R is installed in the aiplane.

63 Navigate to the GEA page and select the Digital In subpage.

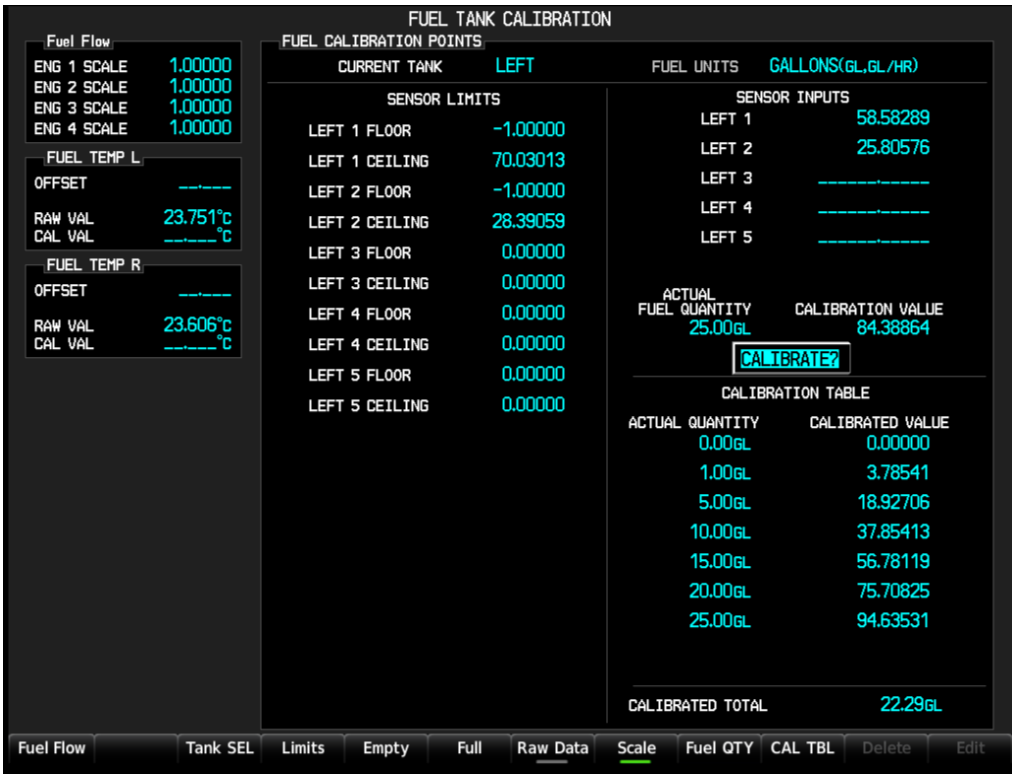
64 Press the “Detail” softkey.

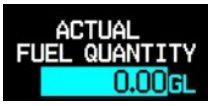
65 Activate the cursor and highlight in the “Select Channel” field following digital inputs. Change their minimum and maximum values as shown below.

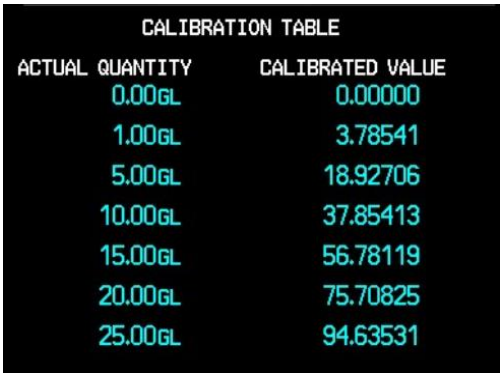
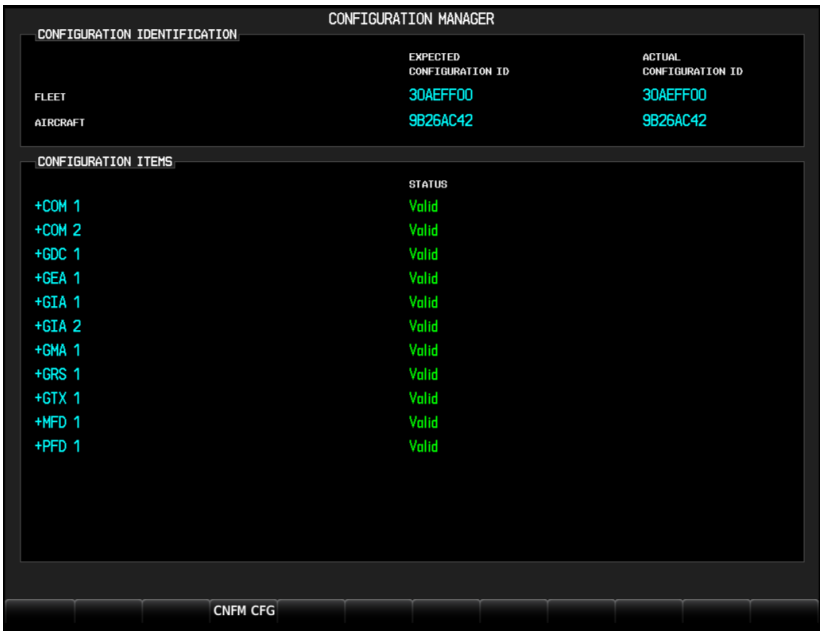
66 **Digital In 1A**
Change the Min Value in the Set column to 2.08000e+03
Change the Max Value in the Set column to 3.00000e+03
Press the Set>Actv softkey and wait until the new Min and Max Values are shown in the Active column.

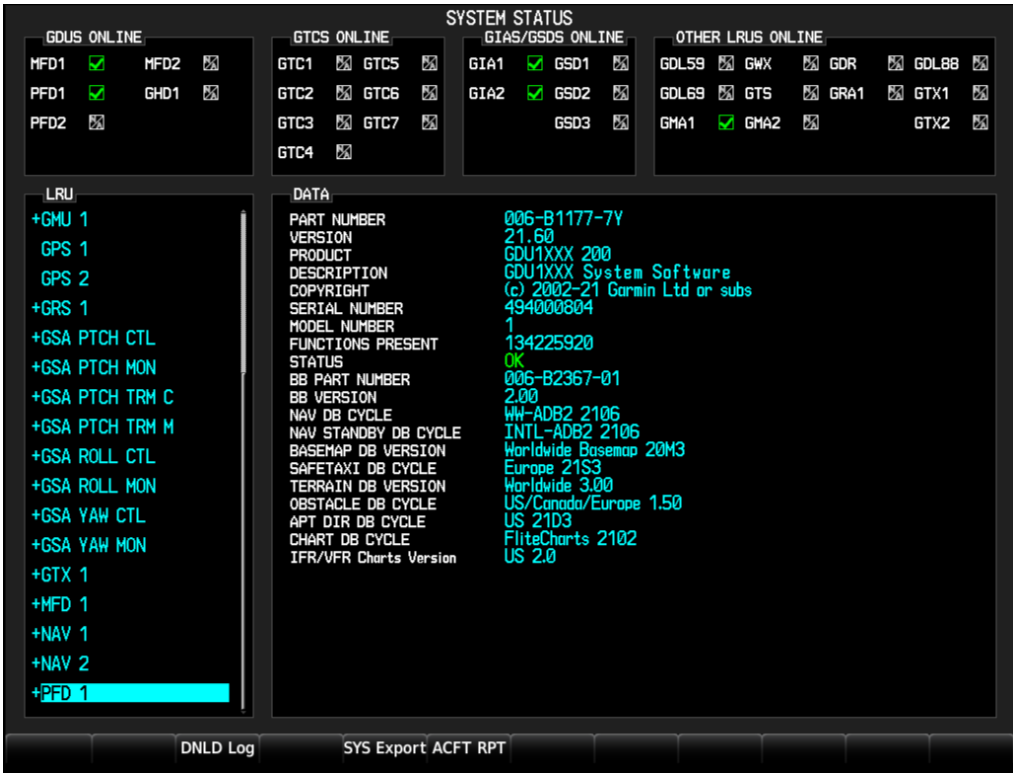
	Digital In 2A Change the Min Value in the Set column to 3.40000e+03 Change the Max Value in the Set column to 4.55000e+03 Press the Set>Actv softkey and wait until the new Min and Max Values are shown in the Active column. **Digital In 3A** Change the Min Value in the Set column to 3.40000e+03 Change the Max Value in the Set column to 4.55000e+03 Press the Set>Actv softkey and wait until the new Min and Max Values are shown in the Active column. **Digital In 4A** Change the Min Value in the Set column to 2.08000e+03 Change the Max Value in the Set column to 3.00000e+03 Press the Set>Actv softkey and wait until the new Min and Max Values are shown in the Active column. 
67	If the option "Fuel Tanks: Fuel Calibration" has been loaded, perform steps 68 to 75. Otherwise proceed with step 76.
68	Level the airplane in accordance with the Airplane Maintenance Manual.
69	Completely drain both fuel tanks.
70	Re-fill 1.0 USgal into the left fuel tank and 1.5 USgal into the right fuel tank.

71	Navigate to the Fuel Tank Calibration page. Press the following softkeys in sequence 12, 11, 10, 9
72	Select the left fuel tank, manually set ACTUAL FUEL QUANTITY to 0.00GL and select CALIBRATE? using the ENT key. Verify data entry and confirm the "Overwrite data" message by selecting YES and pressing the ENT key.
73	Repeat for the RIGHT tank.





74	Re-fill another 1.0 USgal into the left fuel tank and another 1.5 USgal into the right fuel tank and calibrate the data points.  
75	Re-fill another 4.0 USgal into the left fuel tank and another 3.5 USgal into the right fuel tank and calibrate the 5.00USgal data points. Repeat for all datapoints shown in the calibration table. (max. 25.00 LH and 24.00 RH) 
76	Go to the CONFIGURATION MANAGER page and press the CNFM CFG softkey. 
77	Navigate to the SYSTEM UPLOAD page using the FMS knob.
78	Press the UPDT CFG softkey.

79	Wait until the configuration module is updated and then press the ENT key to acknowledge.
Software Load Confirmation:	
80	
81	Using the PFD, go to the System Status page using the FMS knob. Activate the cursor and toggle to the LRU window.
82	In the LRU window, highlight each of the items listed in the following table and verify that the software part number and version displayed on the System Status page matches those listed in the table in MSB 50-003 latest effective issue.
83	De-activate the cursor.
84	Turn off system power.
85	Remove the G1000 NXi System Software Loader Card from the PFD and set it aside.
Software Operational Test:	
	CAUTION Do not insert the obstacle/terrain data SD cards into the bottom slot of both the PFD and MFD until all software and configuration files have been loaded and all displays have been powered up in normal mode at least one time subsequent to loading software. Failure to do so may result in obstacles not displaying correctly.
86	Turn system on in normal mode and wait until it is completely powered up.
87	Turn off system power.

88	Reinsert the database card.
89	Turn system on in normal mode.
90	If messages appear about verifying databases, press any key to continue.
91	Look at the MFD power-up screen. In the upper right corner, the display shows ‘Diamond DA50 System 2576.03’: 
92	Verify that the System Software Version is correct.
93	Press the ENT key to acknowledge the agreement on the MFD (the rightmost softkey may also be used to acknowledge the agreement).
94	Allow the displays to initialize for approximately one minute. The GDC 72 and GRS 79/GMU 44 require a longer initialization period than do other LRUs. During normal operation, this causes the attitude, heading, airspeed, altitude, vertical speed, and OAT fields to be invalid during the first 40-60 seconds of PFD power-up.

95	Verify that no ‘Manifest’ errors appear when the ALERTS softkey is pressed. NOTE: A 'FAILED PATH' message is normal, as long as the Engine Master Switch is switched off. 
96	If the option "Fuel Tanks: Pre-Calibrated" has been loaded into the system, verify correct indication of the fuel quantity indicators.
97	Perform additional testing of the G1000 NXi in accordance with the Garmin G1000 NXi Line Maintenance Manual, P/N 190-02631-00. NOTE: After installation of new software into the G1000 NXi, the optional Synthetic Vision (SVT), Chart View, etc. must be re-activated.
98	Make all necessary entries in the airplane logs.