

SERVICE INFORMATION NO. SI 40-063

NOTE: SI's are used **only**.
1) To distribute information from DAI to our customers.
2) To distribute applicable information / documents from our suppliers to our customers with additional information.
Typically there is no revision service for SI's. Each new information or change of that will be send along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

All DA 40 aircraft equipped with GARMIN GTX 330/330D, GTX 33/33D and GTX 328 Units and with GARMIN G1000 not installed.
All DA 40F aircraft equipped with GARMIN GTX 330/330D, GTX 33/33D and GTX 328 Units and with GARMIN G1000 not installed.

1.2 Subject:

GARMIN: Software Service Bulletin No. 0730 Revision A
ATA-Code: 34-00

1.3 Reason:

GARMIN has issued a Software Service Bulletin which contains information about the incorporation of the new unit Software Version 5.01 for GARMIN GTX 330/330D, GTX 33/33D and GTX 328 Units in non-G1000 applications only.

1.4 Information:

For detailed technical information see GARMIN Software Service Bulletin No: 0730 Revision A which is applicable without any further additions or restrictions.

II. OTHERS

The GARMIN Software Service Bulletin No. 0730 Revision A is attached to this SI.

In case of doubt contact Diamond Aircraft Industries.



SOFTWARE SERVICE BULLETIN

NO.: 0730 Revision A

TO: All Garmin Aviation Service Centers
DATE: 24 September 2007
SUBJECT: GTX 330/330D, GTX 33/33D, and GTX 328 Software Version 5.01
available for non-G1000 applications only

*Note: The term GTX 330 applies to both GTX 330 Mode S Transponders and GTX 330D Diversity Mode S Transponders unless otherwise stated. Likewise, the term GTX 33 applies to both GTX 33 Mode S Transponders and GTX 33D Diversity Mode S Transponders unless otherwise stated.

PURPOSE

This Software Service Bulletin incorporates new unit Software Version 5.01 for the GTX 330, GTX 33, and GTX 328.

The objective for the release of software version 5.01 is to provide support for the GTX 328 unit type. This software provides no functional enhancements to the previous software version 4.06 used in the GTX 33 and GTX 330.

DESCRIPTION

This modification consists of uploading new software to the unit using software available via the Dealer Resource section of the Garmin website (www.garmin.com) or in a CD format (GPN A00-10113-16, requires Windows).

APPROVAL

GTX 330/GTX330D – TSO-C112 Class 2A, ETSO-2C112a Level 2s
GTX 33/GTX33D – TSO-C112 Class 2A, ETSO-2C112a Level 2s
GTX 328 – TSO-C112 Class 2A, ETSO-2C112b Level 2s

The Engineering data contained in GTX 330/GTX 33/GTX 328 Software Version 5.01 are FAA approved. This change is a minor software change.

AFMS AND PILOT'S GUIDE CONSIDERATIONS

There are no recommended AFMS changes.

Document Name	Part Number
GTX 330 Pilot's Guide	190-00207-00, Rev. E or later
GTX 328 Pilot's Guide	190-00420-03, Rev. A or later

PRODUCT AFFECTED

This bulletin is applicable to all GTX 330/GTX 33 units (non-G1000 applications only) with Software Version 4.05 or previous software versions. The unit's current software version is displayed at power up, on either the GTX 330 front panel or the GNS 480 (CNX80) screen for the GTX 33.

This bulletin is also applicable to GTX 328 units with Software Version 5.01 (there are no GTX 328 software versions prior to 5.01). The unit's current software version is displayed at power up, on the GTX 328 front panel.

This Software Service Bulletin authorizes this software version in the applicable LRU(s). The installer or TC/STC holder (if any) must determine applicability and provide for airworthiness at the installation level in accordance with FAA requirements.

COMPLIANCE

Optional: This service bulletin may be incorporated in GTX 330/33 units that have a Software Version prior to 5.01, at the customer's request; or in GTX 328 units requiring a version 5.01 software load.

REFERENCES

Document Name	Part Number
GTX 330 Installation Manual	190-00207-02, Rev. M or later
GTX 33 Installation Manual	190-00303-61, Rev. G or later
GTX 328 Installation Manual	190-00420-04, Rev C or later

MANPOWER

One-hour (1.0) labor including testing.

WARRANTY INFORMATION

This modification is not warranty reimbursable.

MODIFICATION INSTRUCTIONS FOR UPGRADING TO SOFTWARE VER. 5.01

The following paragraph is applicable if acquiring software via the Garmin website.

Before beginning the software field upgrade procedure, software must be downloaded from the Dealer Resource portion of the Garmin website (www.garmin.com). From the Technical Resource list, click on the link for Technical Bulletins and Advisories. Find this Service Bulletin (#0730, Revision A) in the list, and click on the corresponding link in the Downloads column. Follow the instructions to save the file (GTX 330/GTX 33/GTX 328 SW Version 5.01) to the computer to be used for the software update. It is recommended to create a folder 'C:/Garmin' as a target directory for the file.

The following paragraph is applicable if using the software CD.

The Software CD contains one file named '330UPD16.exe', it is recommended to create a folder 'C:/Garmin' as a target directory for the file. Copy the file from the CD to the target directory.

The procedures described below are for the software field upgrade only.

1. Use a test harness for the GTX 330/GTX 33/GTX 328 as shown in Figure 1.

CAUTION

If the unit is removed from the aircraft and operated, always connect J3302 for GTX 330/33 (and J3303 for GTX 330D/GTX 33D) or J3282 for GTX 328 units, to an antenna or a 50 Ω , 5-watt load. The GTX 330/GTX 33/GTX 328 transmits Mode S acquisition squitter replies once per second whether interrogations are received or not. Failure to connect a dummy load during this procedure will cause the transponder to fail.

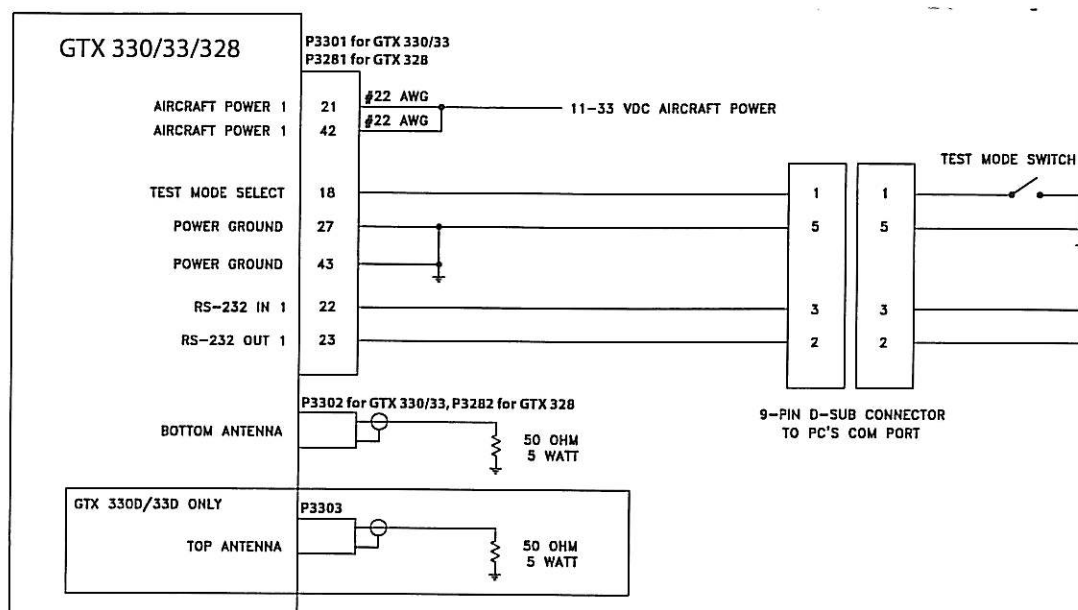


Figure 1

2. Ensure that the unit is turned off. Connect the GTX 330/GTX 33/GTX 328 to the test harness and apply power to the harness.
3. With the unit off, enable test mode via the Test Mode Switch. (Applies a ground to P3301/P3281 pin 18).
4. From the target directory (C:/Garmin) that the update software was saved to (from the Garmin website or from the CD), double click on the file '330UPD16.exe'. This will create four additional files in the target directory. Verify the files are named as follows:
 - 006B0172.SA_0B
 - AVXRGN32.EXE
 - README.TXT
 - UPLOAD16.BAT
5. Connect the 9-pin D-Sub connector of the test harness to a free serial port (COM 1 or 2) on the PC and apply power.
6. Turn the GTX 330/GTX 328 unit on. (The GTX 33 will turn on by the application of power.) The GTX 330/GTX 328 unit will be in test mode and show a dynamic test screen.
7. Double click on the file 'UPLOAD16.BAT'. The program will begin communicating with the GTX 330/GTX 33/GTX 328. (If problems are encountered in starting the software upload, an alternative method is described in the README.TXT file located in the C:/Garmin folder).
8. During the software upload, the GTX 330/GTX 328 unit display test pattern either becomes static or the display will blank, depending on the software version originally installed in the unit. The upload process could take up to 6 minutes to complete; after which the unit will reset itself, turn on, and show a dynamic display test screen.

9. Turn the unit off and disable test mode via the test mode switch.
10. Turn the unit on and verify the new Software Version 5.01 on the GTX 330/GTX 328 Startup/Self-Test Page. Verify the new Software Version 5.01 for the GTX 33 on the GNS 480 (CNX80) display.

MODIFICATION INSTRUCTIONS FOR BACKLOADING TO SOFTWARE VER. 4.06 (GTX 330/GTX 33 only)

Garmin Software Service Bulletin 0626, Rev B provides a means to return a GTX 330/GTX 33 unit to Software Version 4.06, should the need arise.

TESTING PROCEDURE

The unit's built-in Self-Test is adequate to return the appliance to service.

IDENTIFICATION PROCEDURE

The unit's current software version is viewed at power up as indicated in the last step of the MODIFICATION INSTRUCTIONS FOR UPGRADING TO SOFTWARE VER. 5.01.

MATERIAL INFORMATION

All parts required to modify multiple GTX 330, GTX 33 and GTX 328 units per this Service Bulletin are listed below:

QTY	File Name	Description
1	330UPD16.EXE	GTX 330/GTX 330/GTX 328, Field Update Software (version 5.01)
1	A00-10113-16	CD, GTX 330/GTX 33/GTX 328, Software Version 5.01
1	330UPD14.EXE	GTX 330/GTX 33, Field Update Software Version 4.06 (optional, NA to GTX 328)
1	A00-10113-14	DVD, GTX 330/GTX 33, Software Version 4.06 (optional, NA to GTX 328)

A connector kit is available to construct the test harness if required:

QTY	Part Number	Description
1	011-00583-00	GTX 330/GTX 33/GTX 328 Connector Kit