



# **DL40 Plus Message Displays Firmware Upgrade Utility**

## **Contents**

These instructions provide the following:

- Upgrade Utility description and requirements
- Contents of the Upgrade Utility
- Description of the Upgrade Firmware types
- Related Publications list
- Instructions for upgrading DL40 Plus firmware

## **Firmware Upgrade Utility**

The DL40 Plus firmware upgrade utility allows you to download enhanced firmware to any DL40 Plus message display using a personal computer and a download cable. The utility is available:

- on a diskette
- by downloading from the Allen-Bradley web site ([www.ab.com](http://www.ab.com)) Look under Rockwell Automation Technical Support section.

The utility can be used to upgrade both Remote I/O and Parallel port versions of the DL40 Plus along with the DL40 Plus Slave versions. To download upgraded firmware, you need:

- Personal computer (286 minimum)
- DOS operating system ver 5.0 or later (if running Windows 95, reboot in DOS mode)
- 3.5 inch floppy drive
- serial port
- download cable (2706-NC13) or equivalent

## Upgrade Utility Contents

The upgrade utility contains the following files:

File name	Function
UPDATE.EXE	Executable file for the utility.
READ.ME	Important information and notes. Make sure you read this before using the utility. Any information in the read.me file supersedes the information provided in these instructions.

## Upgrade Firmware

The firmware files are supplied separately and must be placed in the same directory as the UPGRADE.EXE utility. Obtain files from your Allen-Bradley representative or download from the web site (see above). The following firmware files are available.

File name	Function
DL40NA.S28	new firmware for Remote I/O versions
DL40PP.S28	new firmware for parallel port versions
SLAVE.S28	new firmware for slave versions

## Related Publications

You may find the following publications helpful if you require additional information about DL40 Plus message displays.

Publication No.	Title
2706-6.1	Dataliner DL40 Plus Message Display User Manual
2706-6.2	DL40 Plus Offline Programming Software User Manual
2706-6.3	Dataliner DL40 Plus Slave Displays User Manual

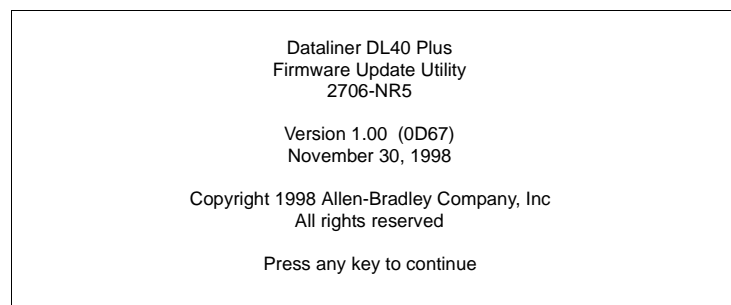
## To Upgrade DL40 Plus Firmware

To upgrade the firmware in a DL40 Plus message display:

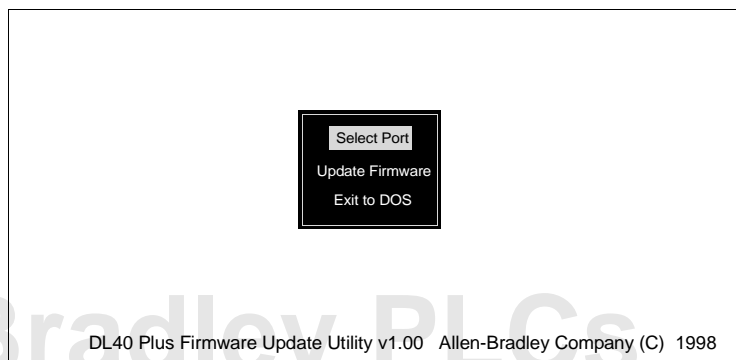


**ATTENTION:** Downloading firmware erases any existing application in the DL40 Plus memory. Upload and save the DL40 Plus application prior to downloading firmware.

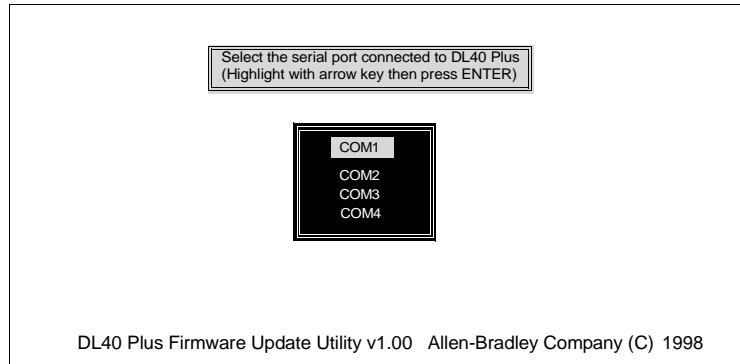
1. Obtain upgrade firmware files from Allen-Bradley representative or download from web site.
2. Place the firmware files in the same directory as the upgrade utility.
3. Turn off the power to the DL40 Plus display.
4. Connect the serial port of your computer to the DL40 Plus RS-232 port. Use the download cable (Catalog No. 2706-NC13) or equivalent. Refer to the display's user manual if additional wiring information is required.
5. Apply power to the DL40 Plus after the connections have been made.
6. Make sure your computer is running in a DOS environment C:\ If you are running Windows 95, select shutdown and restart the computer in MS-DOS mode.
7. Locate the directory where the UPDATE.EXE file is located and run the utility. The program sign-on screen is displayed.



8. Press any key to display the main menu.



- 9. Select Serial Port from the menu. This specifies the serial port connecting your computer to the DL40 Plus.

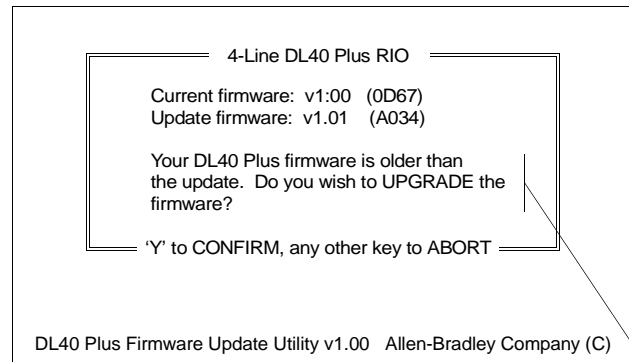


Use the Up and down arrow keys to highlight the port and press [Enter] to return to the main menu.

- 10. Select Update Firmware from the main menu. When prompted, cycle the power on the DL40 Plus (turn off and then back on).

A screen identifying the DL40 and its current firmware is displayed along with the update firmware you are going to download. You are prompted whether or not to continue with the firmware upgrade.

To cancel the upgrade, press any key other than [Y]. Press [Y] to continue with the upgrade.

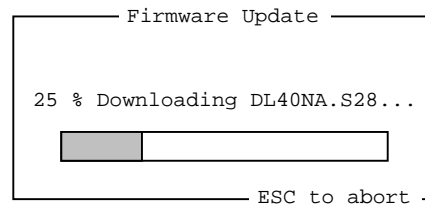


or  
Your DL40 Plus firmware is newer than the update.  
Do you wish to INSTALL the firmware anyway?

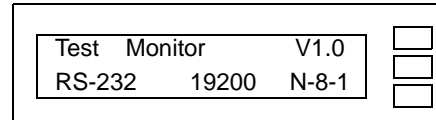
or  
Your DL40 Plus firmware is up to date.  
Do you wish to REINSTALL the firmware anyway?

**Note:** The numbers in parentheses (i.e. 0D67) are the firmware Cyclic Redundancy Check (CRC) values and are provided for reference only.

11. During download a progress bar is displayed by the upgrade software:



The DL40 displays the communication configuration:

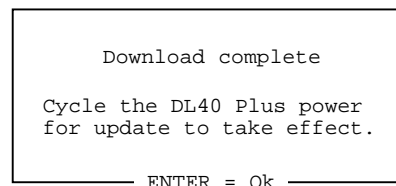


You can cancel the download at any time by pressing [ESC].



**ATTENTION:** If you abort the download while in progress, the DL40 Plus may be placed in an un-runnable state. You must complete the firmware update to ensure proper operation. The DL40 displays MAIN PROGRAM INVALID if firmware is not properly loaded

**WARNING:** When completed, you are prompted to cycle the power on the DL40 Plus.



12. Press [ENTER] to return to the main menu and select Exit to DOS to exit the upgrade utility.

13. Make sure that you cycle power to the DL40 Plus for the upgrade to take effect.

**Important:** The DL40 Plus clock is reset by your computer during download. Make sure you check and change the time on the DL40 as required.



**Allen-Bradley PLCs**

[www.rockwellautomation.com](http://www.rockwellautomation.com)

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