

DGX Firmware Upgrade Instructions

The firmware in your DGx is like the operating system in your computer—it instructs the RGB Spectrum DGx in all of its operations.

Firmware can be easily updated in the field via the RS-232 serial port.

If updated firmware has been published, the file can be downloaded from the RGB Spectrum web-site at <http://www.rgb.com>, in the "Support" section.

The firmware is also available on disk directly from RGB Spectrum. Instructions and release notes accompany the update file.

There is separate firmware for the main board and daughter board of the DGx.

Required for the procedure:

1. A computer or terminal capable of serial communications at 115,200 and 57,600 baud rates, and serial cable for connection to the RGB Spectrum DGx.
2. Current firmware update file and update instructions.

Do not proceed to update firmware without these two items !

Notes:

Firmware cannot be updated using DGx VCP control software. You must use a terminal emulation program—such as HyperTerminal or Procomm—capable of communicating at 115,200 bits per second.

The default version of HyperTerminal shipped with Windows2000 transfers files extremely slowly. We recommend the free upgrade to HyperTerminal Private Edition available at www.hilgraeve.com

Under WindowsXP HyperTerminal update text file transfers often fail with "Found unknown S-record" errors. With WindowsXP it may require several tries to update the firmware.

UPDATING MAIN BOARD SYSTEM FIRMWARE

Follow these steps to update the main board firmware:

1. Set the baud rate of the DGx and your terminal emulator to 115,200 and make sure that your terminal program can communicate with the DGx at this baud rate.

For example, send the HELP command and verify that the DGx returns the Help menu.

2. Type **UPDATEFIRMWARE** at the command prompt and press Enter. The DGx will ask for a confirmation. Type **Y** to confirm.
3. When you see the message "Send S-Record data now!", go to the Transfer menu and select Send Text File. Browse your computer until you locate the update file (DGX_MB.abs) and open the file to send it. On the screen, progress dots appear during the download.

After the firmware update procedure is complete, the system is restored to factory defaults. The baud rate will be set to 9600 BPS and all data previously stored to the EEPROM will be erased.

UPDATING DAUGHTER BOARD SYSTEM FIRMWARE

After you update the DGx main board, you should then update the daughter board firmware using the following steps:

1. Set the baud rate of the DGx and your terminal emulator to 57,600 and make sure that your terminal program can communicate with the DGx at this baud rate.
2. Type **DGXFIRMWAREUPDATE** at the command prompt and press Enter. The DGx will ask for a confirmation. Type **Y** to confirm.
3. Restart the DGx by turning the power switch off and then back on.
4. Once the DGx restarts, you are prompted to type the command **STARTDGXUPDATE**.

When you see the message "Send S-Record Data", go to the Transfer

menu and select Send Text File.

Browse your computer until you locate the update file (DGX_DB.abs) and open the file to send it. On the screen, progress dots appear during the download.

You will be prompted to reset your terminal baud rate to 9600, and to restart.

5. Restart your DGx again by turning the power switch off and then back on. After the DGx has reinitialized, you will see the messages:

"Current stored baudrate is 57600"

"Reset baudrate to 9600 (y/n):"

Type **Y** within a few seconds to maintain the baudrate at 9600 as you recently set it.

After the firmware update procedure is complete, the system is restored to factory defaults. The baud rate will be set to 9600 BPS and all data previously stored to the EEPROM will be erased.