## View 6000 FIRMWARE UPDATE PROCEDURE

\*\*Version 1.02 or later\*\*

Date: December 7, 1998

**RGB Spectrum** 

The firmware for the View 6000 can be field updated. This is a fairly simple procedure using the unit's Primary RS-232 serial port. These instructions cover units with version 1.02 or later. For units with earlier firmware versions, contact RGB Spectrum for update instructions.

To determine the current firmware version of your unit, send the serial command "ID".

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**IMPORTANT** - Your serial communications device must be capable of a 115,200 baud rate or you will be unable to upload the new firmware. The update file can only be sent at a 115,200 baud rate.

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## I. Where to Get the Firmware Update File

There are two ways to get the latest View 6000 firmware:

- On diskette from RGB Spectrum
- Download from the product support page on the RGB Spectrum website

## II. What You'll Need

For this update procedure, you'll need the following items:

- A computer capable of a 115,200 baud rate
- Communications software (i.e. "HyperTerminal" for Windows 95/98/2000/NT/XP
- Serial cable with proper adapter to connect from the female RJ45 jack on the View 6000 to the serial communications port on your computer

• Firmware update file

## **III. The Upgrade Procedure**

Step For the upgrade procedure, start with the following connections to the View 1: 6000 in place:

- Power cord
- RS-232 connection at the serial port (The above items are all that is needed for the upgrade process. You may also have video input and output cables connected these will not interfere with the upgrade process.)

Step Establish serial communications between your computer and the View 6000. 2:

The default baudrate for the View 6000 is 9600.

For Windows 95, 98, NT, 2000, XP computers running HyperTerminal, open a connection using the following communications parameters: 9600 bits per second, No parity, 8 data bits, 1 stop bit, and XOn/XOff flow control (software handshake). If you already have a connection open, check the parameters by looking in the FILE menu under "Properties". Under the "Connect To" ("Phone Number" 95) tab, select the "Configure" button and verify the parameters.

Check to see if you are now communicating with the View 6000. Type "id". If you see the characters you are typing and get a response from the View 6000, then communications have been established. If not, try each of the following steps, checking after each to see if communications have been established:

1. From HyperTerminal, under the CALL selection on the HyperTerminal menu bar, first select "Disconnect". Then select "Connect".

(check to see if communications have been established; if not, go to #2 below)

2. Power cycle the View 6000. After the booting process, the terminal should show the following messages:

Current baudrate is xxxxxx Reset baudrate to 9600? (y/n): Then select y to change the baudrate to 9600.

With communications established, set the View 6000 to a 115,200 baud rate with the command "baudrate 115200". Now the View 6000 and your computer are set to different baud rates and you can no longer communicate.

Next, set your computer's communication speed to 115,200. Once again, in the FILE menu, select "Properties". Under the "Phone Number" tab, select the "Configure" button and set the Bits per second selection to "115200".

Check to see if you are now communicating with the View 6000. Type "id".

If you see the characters you are typing and get a response from the View 6000, then communications have been established.

**HYPERTERMINAL USERS:** Whenever you reset the communication speed while a connection is open, you will need to DISCONNECT and then RECONNECT. Use the CALL menu on the HyperTerminal menu bar. First select "Disconnect". Then select "Connect".

Step Send the command "UPDATEFIRMWARE" 3:

- Step 4: Refer to your terminal screen. You will be prompted to confirm your request to update the firmware. Type "Y" to continue. Typing "N" will cancel the update process.
- Step 5: You should observe the unit erasing all ten of its Flash EPROM sectors.

Next, a message will appear reading "Send S-record data now!". The unit is now ready to receive the firmware upgrade file.

Step 6: Place the RGB Spectrum Firmware Upgrade Diskette in your computer's floppy drive, or load the unzipped files to your hard drive. The update file name will be "V6Kxxx.abs", where "xxx" is the version number (e.g. V6K142.abs is version 1.42).

From your communications software (i.e. HyperTerminal), upload the firmware file to the View 6000. To upload the file, use your communications program's file transfer feature.

In HyperTerminal, under the TRANSFERS menu, select "Send Text File". This opens the Send Text File dialogue box. Use the "Look In" box to locate the V6Kxxx.abs file. You will need to select the option to view ALL files. Select the file by clicking on it and click on the "Open" button to send.

THE PROCESS WILL TAKE UP TO 15 MINUTES. During this time only a few messages, such as "Found empty Srec", may be echoed to your terminal. These messages are expected and can be ignored. The View 6000 will appear dead.

Step 7: When you receive the message "Finished loading flash...reboot" on your terminal console, the upload process is complete.

The system will reboot itself and then resume regular operations.

**ERROR MESSAGES:** If you receive any error messages during the upload process, you will need to repeat it.

Make sure your communication parameters are set correctly (see Step 2). Then from HyperTerminal, under the CALL selection on the HyperTerminal menu bar, first select "Disconnect". Then select "Connect".

Power cycle the View 6000, and you will be back in the upload process, at Step 5. Continue as instructed.

At the successfully conclusion of the update process, the View 6000 will be in the state prior to update. The baud rate of the unit will be 115,200. If for any reason that the NVRAM is erased during firmware update, the baudrate will be reset to 9600. In this case, you have to reset the terminal baudrate to 9600 in order to communicate with the View 6000.

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