

Radiance™ Tech Tip 6

Updating the Software

Introduction

You can check your software revision by looking at the Radiance™ Info Screen. To display the Info Screen, press the “OK” button on your remote when the menu is not up. The Info Screen can also be reached using the Menu (Menu -> Info). Compare the software date from the info screen, which is in 6-digit MMDDYY format, with the most recent update on the website.

Here is the URL for the main update page:

<http://www.lumagen.com/testindex.php?module=updates>

Click on the hyperlink for the model you own to see the latest updates.

Download the latest software update (top most update link). You do not need to update with any intervening updates. Saved settings and configurations aren't changed when you load the software update (unless otherwise noted in the update log).

The update can be performed with a PC and a serial cable, or USB cable, depending on the model. Note a PC emulator on a MAC® should work but is not supported by Lumagen.

Equipment needed

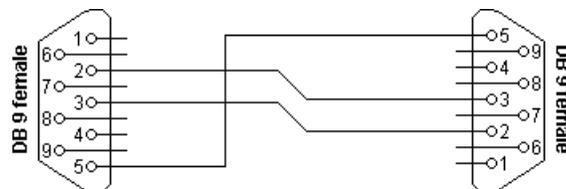
1. Lumagen Radiance Video Processor
2. DB9-F to DB9-F null-modem serial adapter (provided) for older Radiance models, or a USB cable (provided) for Radiance 21XX and Radiance Pro™ series
3. PC compatible computer.
4. USB to serial adapter for PCs without a serial port for older Radiance models. The Radiance 21XX and Radiance Pro series connects directly to a USB port and uses a USB-to-serial adapter inside the Radiance (21XX and Pro only).

Computer requirements

- Windows® 95, 98, ME, 2000, XP, Vista, 7, 8 or 10
- RS232 Serial port or USB port

RS232 Null-Modem Serial cable requirements

- RS232 DB-9F to DB-9F (female-to-female) RS232 connectors (9-pin) null-modem cable
- Note that pins 2 and 3 are swapped with each other in the cable.
- This is described as a *Null Modem Cable*, rather than a *Straight Through Cable*.
- Only pins 2, 3, 5, and shield, are used.



Making the connection

If the computer only has a USB connector, for older Radiance models, you will need to use an external USB-to-serial port adapter. We recommend one which used the FTDI USB-to-serial chip. An adapter isn't required if the computer has a RS232 connector. With or without an adapter, you will need the null-modem serial cable for older Radiance models.

For the Radiance 21XX and Radiance Pro series a USB slave connection, and a USB cable, are provided. Note that the interface remains a virtual serial port interface. The difference is that the USB-to-serial adapter is inside the Radiance itself, eliminating the need for an external USB-to-serial adapter.

Running the update

Download the software update and unzip the file. *Note that the update is a .EXE file. You may need to override the objection of your virus software to run this program.*

For older models connect your PC to your Radiance using the null-modem serial cable and a USB to serial adapter if needed. For the Radiance 21XX and Radiance Pro series, connect the Radiance to the PC using the supplied USB cable.

Insure that you have a stable power supply to the Radiance and PC. For example, don't update the software during a lightning storm. The following describes the normal update process:

1. Turn the Radiance power on.
2. On the PC double click (run) the download utility. *Note: You may need to override the objection of your virus software.*
3. Select the correct COM port. See *Finding the COM Port* for more information.
4. Select the BAUD rate. In most cases the fastest available BAUD rate will work. If there are issues completing the download you can try a slower BAUD rate.
5. There is a *Force* option available. If you have an issue with a download or think the Flash ROM may be corrupted (e.g. by a power surge), you can click the *Force* option to insure that the entire update is applied and not just out of date sections.
6. Click "Start" when you are ready to begin the download.
7. When complete the update utility will put a message on the PC screen. After the update is complete the Radiance tries to power off. If the Radiance does not power off, wait one minute and then remove power.
8. If the utility finishes with an error turn the Radiance off, then back on, and exit and restart the update utility.
9. If you have trouble downloading new software to the Radiance, try searching for an updated driver for your USB-to-serial port adapter. Load the updated driver on your PC and try again.

Finding the COM Port

For the update program, the correct COM port must be selected. The directions for doing this are very similar for the different Windows versions. The following is for Windows 7.

1. Select the *Control Panel* from the launcher button which is usually at the lower left of the screen.
2. In the *Control Panel* select *System*
3. Under *System* select *Device Manager*
4. Under *Device Manager* find *Ports (COM & LPT)* and expand it to see the devices.

- 5 With the RS232 Null modem cable, and if appropriate the USB to serial adapter, connected, and the Radiance turned on and connected, check to see which COM port is assigned to the Radiance.
- 6 Make sure the COM port is 9600 BAUD, 1 STOP bit and no parity.
- 7 If the assigned port is higher than 16 you will need to reassign it to a lower number. If so, for the appropriate COM port, click *Port Settings*, and then the *Advanced* button. Then change the COM port to one you know is not being used in the range of 1 and 16. Do not select a port number already listed. Typically choosing a port numbered 5 or above will work. Then click OK to accept. If the PC says that port is already in use but the Port is not in the active list, it may be acceptable to override and use it if you know you are not using other USB virtual serial ports, or select a different port and try again. Once done accept the port, and click OK to close the *Properties* Window. You can right-click on the COM port being used in the *Device Manager* Window and select *Scan For Hardware Changes* to see that the change was accepted.
- 8 Select the assigned COM port in the update program

Using Boot Mode Update to update software

If the Radiance doesn't power up correctly, or there is some other issue with updating, you can update the software with a *Boot Mode Update*.

1. Download and start the update program, and make all connections (serial or USB) as described in the *Running the Update* section.
2. Connect power to the Radiance, and find the assigned COM port as described in the *Finding the COM Port* section.
3. Select the COM port and BAUD rate as normal.
4. Disconnect the Radiance from AC power. Note: Leave RS232 serial and/or USB connections in place.
5. Connect the Radiance to AC power, and within 10 seconds click start in the update program.
6. The firmware update should start. The PC utility will finish and tell you when it's done.
7. If the utility finishes with an error you can go through the steps again.
8. If you have trouble downloading new software to the Radiance, try searching for an updated driver for your USB-to-serial port adapter. Load the updated driver on your PC and try again. If it still does not update, it could be a bad Radiance power-supply, a Radiance failure, or a PC setup issue.