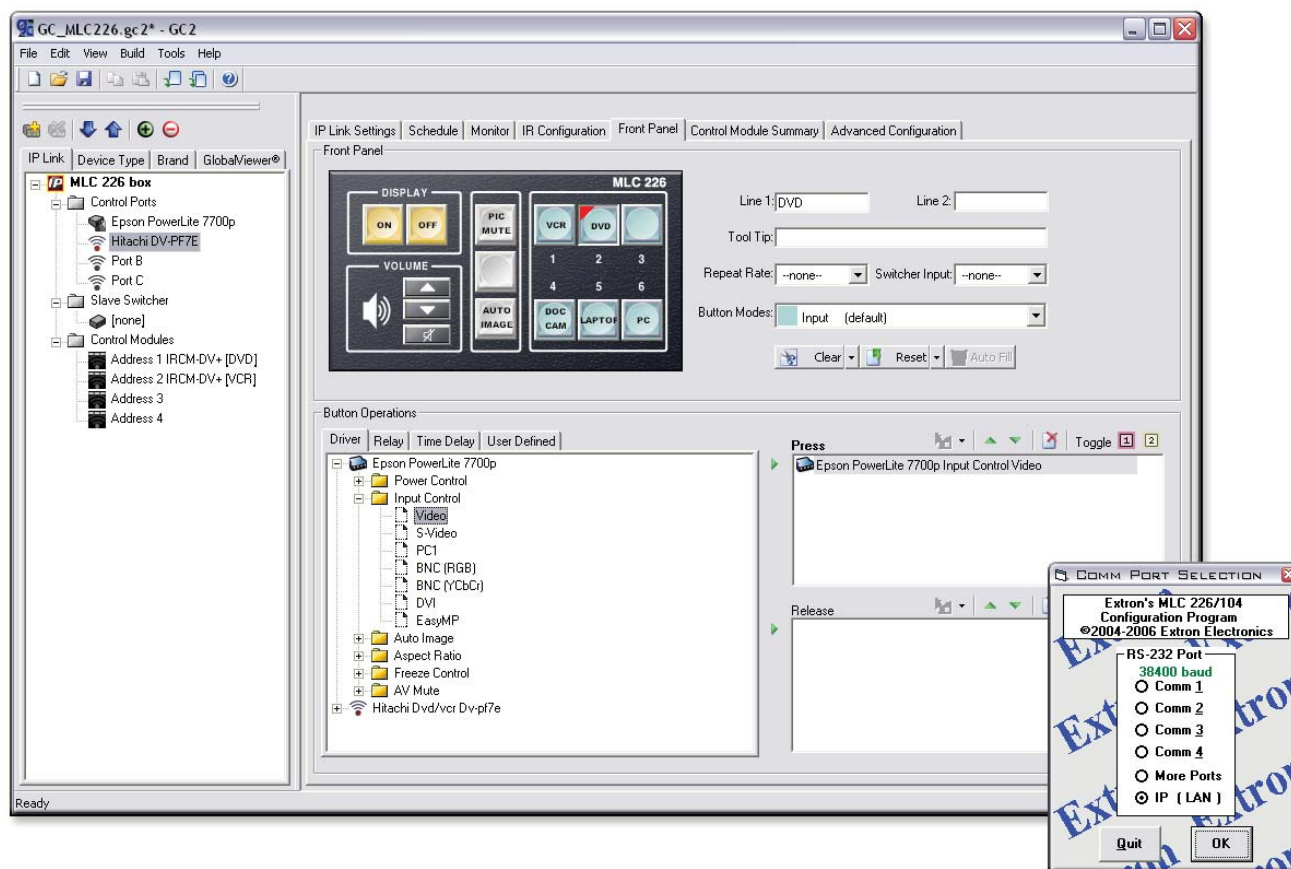


## Upgrade Guide

### PRELIMINARY



*Global Configurator 2.2,  
MLC 226/104 Configuration Program 3.1.1, and  
System 5 IP Configuration Program 3.1.1*

# PRELIMINARY

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## Introduction

This installation guide provides step by step instructions on how to

- [Upgrade to Global Configurator 2.2](#)
- [Upgrade from GC 2.0.x](#)
- [Upgrade from GC 2.1.x](#)
- [Upgrade to MediaLink 226/104 or System 5 IP Configuration Software 3.1.1](#)
- [Upgrade the System 5 IP with patch firmware \(This includes information on how to retain IP settings after upgrading from version 1.0x to 2.00.\)](#)

If you encounter problems with the following upgrades, please keep in mind that Extron Technical Support (<http://www.extron.com/company/contactus.asp>) is only a phone call or a few mouse clicks away.

## Upgrading to Global Configurator 2.2: a Checklist

Prior to upgrading your existing Global Configurator (GC) project to GC 2.2, ensure that the following four elements are present on your system.

### ☐ The Global Configurator project file

For GC 2.0.x

- Original project files

For GC 2.1.x

- Original project files or
- Import a compressed project file (.gcc) or
- Import the file from an IP Link device

### ☐ The Extron serial and IR drivers used in the project file

These drivers can be found

- On the Extron Web site (<http://www.extron.com/iplinkdrivers>)
- Via the Driver Subscription feature of GC 2.2
- Via the IR Learner software's user-defined IR drivers (.eir)

**NOTE** Defective device drivers are routinely removed from the Extron Web site, so you may find that some drivers are missing. Most of these drivers are replaced with newer versions.

*If a required device driver is missing after you open your project in GC 2.2, and it cannot be found on the Extron Web site, search for an updated version of the driver. When the correct driver is found, you must upgrade it for every IP Link device in your network.*

### ☐ The minimum firmware version for the MLC products

Global Configurator 2.2 requires the following minimum firmware versions. Any IP Link device with an earlier version requires a firmware upgrade. This firmware can be obtained from the Extron Web site (<http://www.extron.com/iplinkdrivers>).

- MLC 104 Series, version 1.03
- MLC 104 IP Series, version 1.03
- MLC 226 IP Series, version 1.05

**NOTE** For IP Link devices that reside on a network, firmware can be easily upgraded using IP Link File Manager 1.1.3 or later.

## Upgrade Guide, cont'd

**NOTE** If a firmware update is needed, execute the **EscZY reset** command after the firmware is updated. See the firmware's release notes for instructions.

☐ **The minimum firmware version for the System 5 IP products**

Global Configurator 2.2 requires the following minimum firmware version. Any IP Link device with an earlier version requires a firmware upgrade. This firmware can be obtained from the Extron Web site (<http://www.extron.com/firmware>).

System 5 IP Series, version 2.00

**NOTE** For instruction on how to **retain your System 5 IP settings** when upgrading the firmware from version 1.0x to 2.00, please refer to the [System 5 IP Patch Firmware Upgrade](#) section.

☐ **IP Link devices that are online**

Upgrading to Global Configurator 2.2 requires that all IP Link devices be online to successfully upload the configuration.

**NOTE** When uploading files to devices, please note that any customized GlobalViewer (GV) files, including those placed in the GC2 directory of an IP Link device, must be uploaded **after** the GC 2.2 upload process is complete.

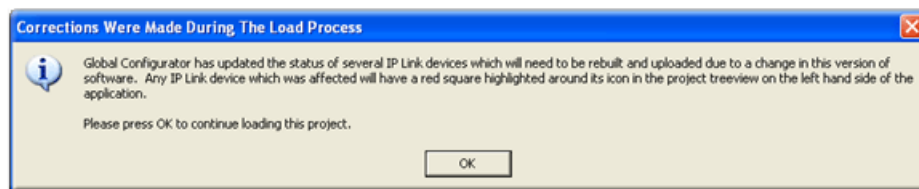
### Upgrading from GC 2.0.x

Upgrading from Global Configurator (GC) 2.0 requires the original project file (.gc2) and all of its device configuration files (.xml). The Import File option **cannot** be used for this configuration.

#### Step 1: Open the GC project file.

1. Open the Global Configurator file by choosing **Open...** from the **File** menu and choosing the file.

The following message box appears.



2. Click **OK**.

#### Step 2: Rebuild all devices in the configuration

1. From the **Build** menu, choose **Build All Configurations**. The Upload Manager appears when the build is complete.
2. On the Upload Manager window, click **Begin**.
3. Click **Close** when the upload is complete.

Using this rebuild option saves your project in the new GC 2.2 format.

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## Upgrading from GC 2.1.x

Use any of the following three methods to upgrade from GC 2.1.x:

- Open the original GC2 project file (.gc2).
- Import the project from an IP Link device on a network.

**NOTE** *Importing from devices online requires that **all** IP Link devices in the project be online.*

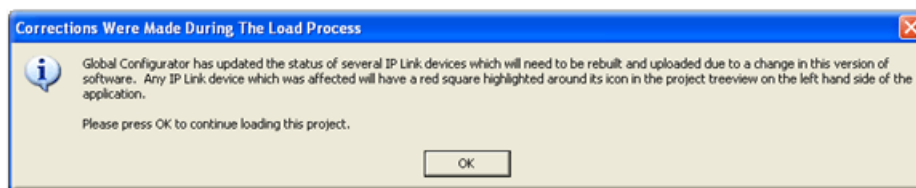
- Import the project from a compressed GC2 project file (.gcc) from a disk.

### Opening the original GC2 project file

#### Step 1: Open the GC project file.

1. Open the Global Configurator file by choosing **Open...** from the **File** menu and choosing the original file.

The following message box appears.



2. Click **OK**.

#### Step 2: Rebuild all devices in the configuration.

1. From the **Build** menu, choose **Build All Configurations**. The Upload Manager appears when the build is complete.
2. On the Upload Manager window, click **Begin**.
3. Click **Close** when the upload is complete.

Using this rebuild option saves your project in the new GC 2.2 format.

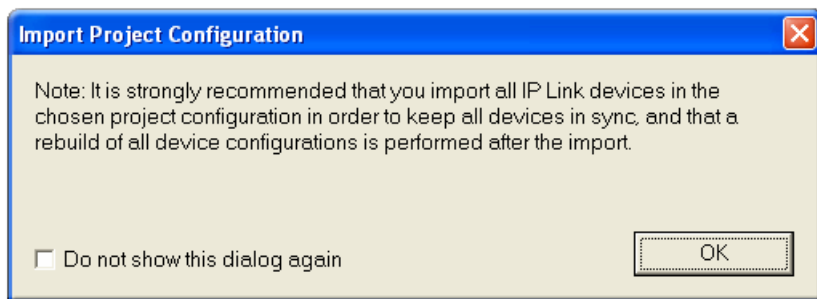
### Importing the GC2 project from a disk or network

#### Step 1: Choose the Import Project Config... option.

1. From the Global Configurator software, choose **Import Project Config...** from the **File** menu.

The default Import Project Configuration dialog appears (as shown below), suggesting that you rebuild all IP Link devices. This occurs regardless of where the GC2 project is imported from.

2. Click **OK**.



#### Importing from a GV Host

1. Choose the **IP Link Device** radio button.
2. Enter the **host name** or **IP address** of the GV Host IP Link device

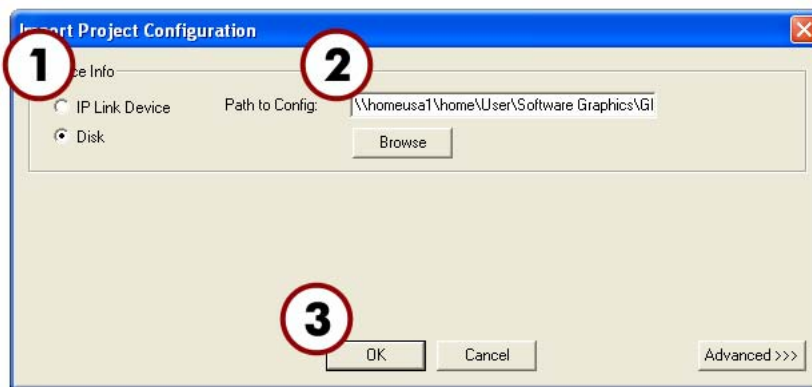


3. Click **OK**.

**NOTE** When importing via an IP Link device, you must import using the same communication method as your previous upload. For example, if you previously uploaded to the device serially, you should import the device configuration serially again.

### Importing from a disk

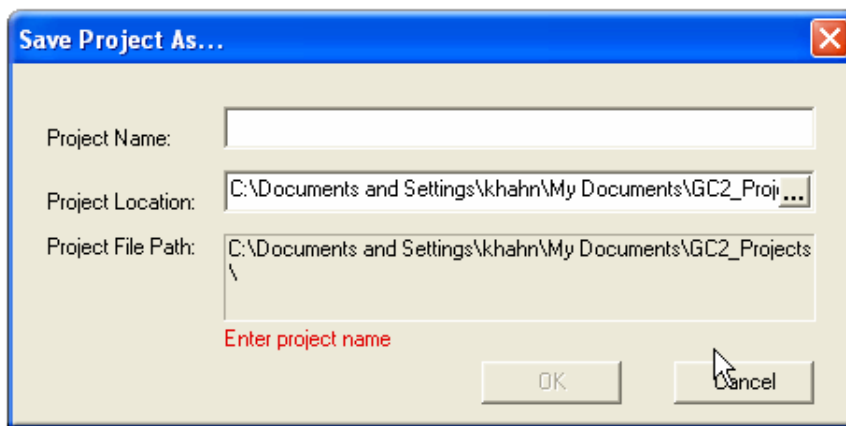
1. Choose the **Disk** radio button.
2. Browse to a compressed GC2 project file (.gcc) previously exported from a disk, as shown on the following page.



3. Click **OK**.

### Step 2: Rebuild all configurations.

1. Before rebuilding, name and save the project by selecting the **Save Project As...** option from the **File** menu.



2. From the **Build** menu, choose **Build All Configurations**. The Upload Manager appears when the build is complete.
3. On the Upload Manager window, click **Begin**.
4. Click **Close** when the upload is complete.

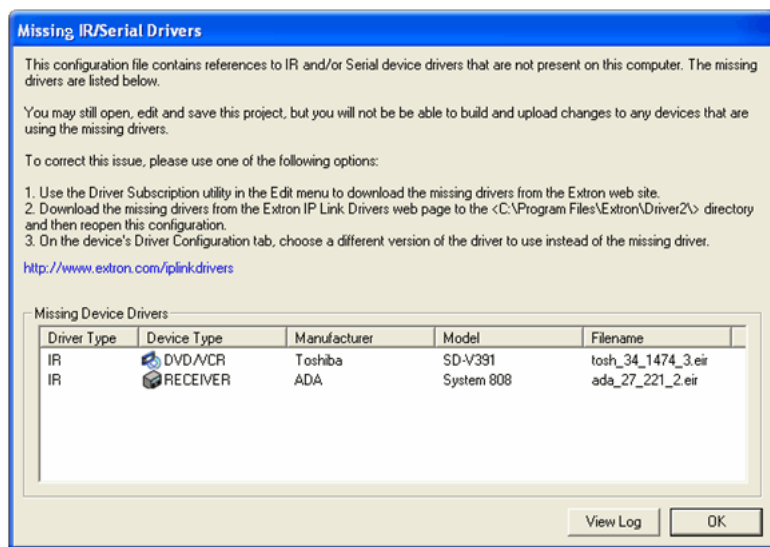
## Upgrade Guide, cont'd

### Troubleshooting

There are several issues that may impede a successful upload. Please take note of the following potential problems.

#### Missing serial and/or IR drivers

If an IR or serial driver used in your GC project file cannot be found on your PC, the following dialog box appears.



To obtain the needed drivers, use the Driver Subscription feature or download the drivers from the Extron Web site.

**NOTE** If using the driver subscription feature, you must rebuild the driver database. This is most easily be done by exiting and restarting GC 2.2.

#### Upgrading firmware over a network

**CAUTION** If you are upgrading firmware but your original configuration file **does not** reside on a disk, download the configuration from your IP Link device(s) **before** upgrading. The firmware upgrade may require a device reset, which would erase the current files on your IP Link device.

For networked IP Link devices with outdated firmware, the 1.1.3 version of IP Link File Manager allows you to upgrade multiple IP Link devices at the same time.

To use this feature, choose **Firmware Update Manager** under the **Tools** menu. Before selecting this option, ensure that all IP Link devices are included in IP Link File Manager's list.

**NOTE** IP Link File Manager can open GC2 project files (.gc2).

**NOTE** Firmware Update Manager can update only the firmware of similar devices. By selecting the **Model** column, you can easily sort the list, selecting only those devices in the list that require updating.

Download IP Link device firmware from the Extron Web site (<http://www.extron.com/firmware>).

## Potential build and upload problems

There are several errors that can occur during the build process. The following are common error messages that may appear in the **Upload Manager**.

**Problem: Insufficient firmware**

**Solution:** Obtain the minimum required firmware version and upgrade those devices that indicated errors during the build.

**NOTE** Use IP Link File Manager 1.1.3, available from the Extron Web site.

**Problem: Insufficient file space**

**Solution 1:** Erase all the files on the IP Link device(s) that reported insufficient space.

**NOTE** For this step, you can use the Device Settings feature in GC 2.2.

**Solution 2:** Use the GV Host Flag option to find only 8 MB IP Link devices.

**Problem: Unable to connect to device**

**Solution:** While it is still possible to upload the project, devices that are offline (or unconnected) are still susceptible to this problem. GC 2.2 properly marks these IP Link devices as not being uploaded, but you can upload them at a later date by selecting the **Build Changed Configurations** menu option.

## Upgrading to MediaLink 226/104 or System 5 IP Windows-based Control/Configuration Program 3.1.1

### The Windows-based configuration program upgrade checklist

Prior to upgrading your existing MediaLink 226/104 or System 5 IP configuration, ensure that the following elements are present on your system.

☐ **The Window-based configuration software, version 3.1.1**

The software can be found on the Extron Web site.

☐ **All Extron serial and IR drivers used in the device configuration**

- These drivers can be found on the [Extron Web site](http://www.extron.com/download/driverfilter.asp).
- For IR drivers only, you can “learn” the command using the IR Learner software (obtained from the Extron Web site download center (<http://www.extron.com/download/driverfilter.asp>)).
- If the drivers you are using can not be found on the Extron Web site, please contact Extron and ask to speak with an Applications Engineer.

**NOTE** Defective device drivers are routinely removed from the Extron Web site, so you may find that some drivers are missing. Most of these drivers are simply replaced with newer versions.

*If a required device driver is missing after you open your project in GC 2.2, and it cannot be found on the Extron Web site, search for an updated version of the driver. When the correct driver is found, you must upgrade the driver for every IP Link device in your network.*

☐ **MediaLink and System 5 IP devices that are online**

This upgrade requires that all previously configured devices be rebuilt and uploaded.



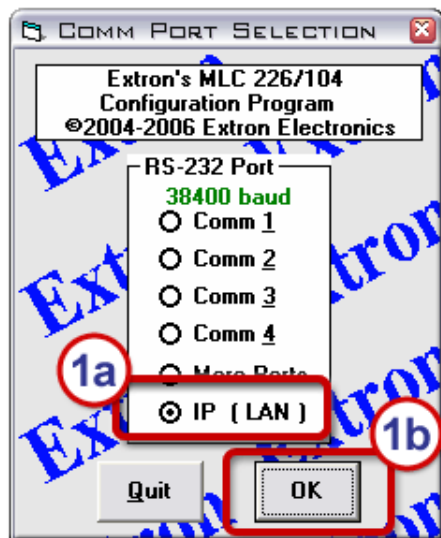
## Upgrade Guide, cont'd

### Upgrading to configuration software 3.1.1

After updating the configuration software on your PC to version 3.1.1, you **must** rebuild and upload the MLC or System 5 IP configuration. Simply restoring a previously saved configuration cannot fix inherent problems in version 3.1 of the configuration software.

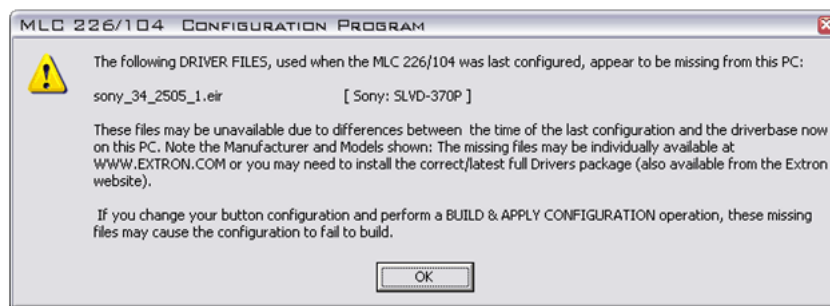
#### Step 1: Connect with the device.

Open the configuration software and connect to the MLC or System 5 IP device via RS-232 or IP (shown below).



#### Step 2: Obtain missing drivers.

If your PC is unable to find certain IR and/or serial drivers in the configuration, a warning dialog appears (as shown below). If there is no warning, skip to **step 3** below.



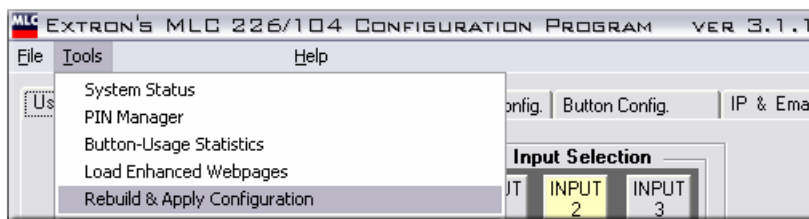
1. Download missing drivers from the Extron Web site.
2. Place downloaded drivers in the C:\Program Files\Extron\Driver2 directory.
3. Use the driver filters to find the device(s) listed in the dialog above.

When new drivers are successfully downloaded to the PC, you must restart the configuration software.

### Step 3: Rebuild and upload the configuration.

To complete the upgrade process, you must rebuild the configuration and upload it to the device. Copies of the configuration files are stored on the MLC/System 5 IP, so they are not required to reside on your local PC. The configuration software pulls the configuration from the unit when the application is started.

1. To rebuild and upload the configuration, select **Rebuild & Apply Configuration** from the **Tools** menu, as shown below.



A message appears, prompting you to proceed with rebuilding the configuration.



2. Click **OK**.

### Step 4: Apply upgrade to all devices in the project.

Repeat steps 1 through 4 for all MLC 226 IP, MLC 104, MLC 104 IP, and/or System 5 IP devices in your system.

## System 5 IP Patch Firmware Upgrade

The following instructions allow you to **retain IP settings when upgrading from firmware 1.0x to 2.00 or higher on the System 5 IP Series Switchers**. The stored IP settings include the following:

- IP Address
- Gateway IP Address
- Subnet Mask
- Unit Name
- DHCP Setting
- Port Mapping (telnet/Web/direct access)

For more information please call your Extron Applications Engineer.

## Upgrade Guide, cont'd

The patch (applicable to **firmware versions prior to 2.00**) loads into a standardized location on your computer using a Windows installer application. The specific file name for this patch is **503512V100.s19**. The following files are loaded onto your computer:

- 503512V100.S19
- System\_5\_IP\_FW\_Patch\_Instruction\_01.pdf
- Patch\_Web\_Loader\_Sys5IP.html
- System\_5\_IP\_19\_1335\_50\_V2\_00.S19
- System\_5\_IP\_FW\_Revision\_History\_04.pdf

### Upgrade instructions using the Patch Web Loader

An easy to use program called the **Patch Web Loader** can be loaded onto your System 5 IP switcher to facilitate the upgrade process. After running the software setup, follow the instructions below to ensure a proper update to the System 5 IP switcher.

#### Step 1: Load the Patch Web Loader.

After you run the software installer, the Patch Web Loader program copies itself onto your hard drive, but must be uploaded to the switcher.

1. Using Internet Explorer®, browse to the System 5 IP internal Web page by entering **http://x.x.x.x/nortxe\_index.html**, where x.x.x.x is the IP address of the product to update.
2. Select the **File Management** tab and browse to the directory specified during setup. The default location is **C:\Program Files\Extron\Firmware\System\_5\_IP\04**.
3. Select the Patch Web Loader file, **Patch\_Web\_Loader\_Sys5IP.html**, and then click **Upload File** to initiate the process.



## Step 2: Run the Patch Web Loader.

The Patch Web Loader should appear listed under the file selection area.

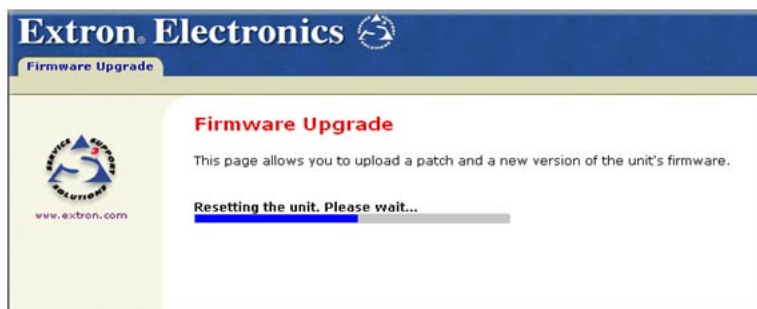
1. Locate the **Patch Web Loader** file.
2. Double-click the file. A browser window opens.



3. Browse to the directory specified during setup and select the patch file. The default location is **C:\Program Files\Extron\Firmware\System\_5\_IP\04**.
4. Select the patch file **503512V100.S19**, then click **Upload** to initiate the process.



The unit automatically resets once the upload process completes.



After you have successfully applied the patch, the current firmware version is displayed as **1.00.0007** (see step 2, above, to review the version prior to patch installation).

## Upgrade Guide, cont'd



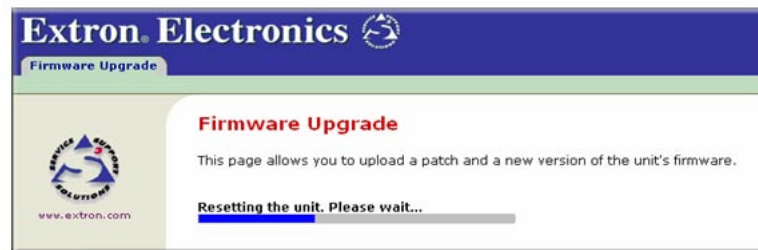
### Step 3: Upgrade the firmware.

It is now safe to load firmware version 2.00.

1. Browse to the directory specified during setup. The default location is **C:\Program Files\Extron\Firmware\System\_5\_IP\04**.
2. Select the firmware file **System\_5\_IP\_19\_1335\_50\_V2\_00.S19**, then click **Upload** to initiate the process.

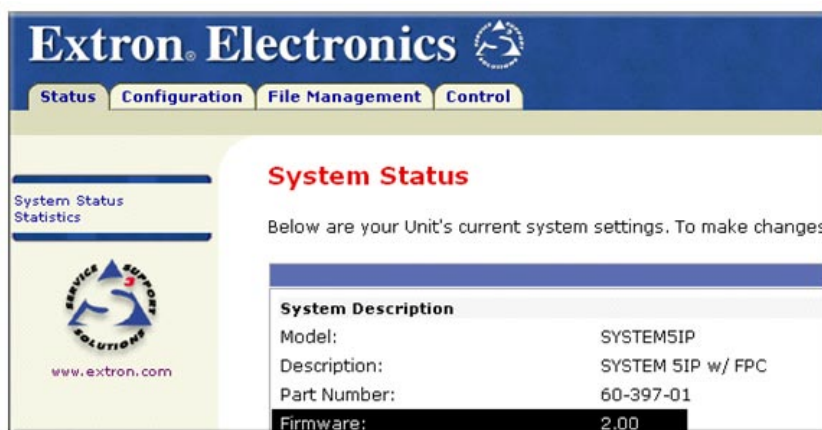


The unit automatically resets once the upload process is complete.



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After the firmware is loaded successfully, the current firmware version displays as 2.00.



3. Once the upload is complete, execute the **EscZY reset command** via Telnet or RS-232.
4. Close the browser or repeat the above to upgrade additional System 5 IP switchers.

### Instructions for upgrading without Patch Web Loader

If you are an administrator or are familiar with loading firmware, use the following instructions to upgrade without using the Patch Web Loader software.

#### Step 1: Verify the product candidacy.

The included patch file is designed to work with factory installed firmware versions 1.01 through 1.03.

1. Follow the steps below to determine if the patch file is needed:
  - a. Connect via Telnet to the product being updated by entering **Start>Run>telnet x.x.x.x**, where x.x.x.x is the IP address assigned to the product.
  - b. Enter the SIS command **2I**  
This returns the product name which can be compared to the products shown above.
  - c. Enter the SIS command **3Q**  
This returns the factory installed firmware version in the format x.yy, which must be between 1.01 and 1.03 for this patch to work correctly.

## Upgrade Guide, cont'd

### Step 2: Apply the Patch.

1. Using Internet Explorer, browse to the System 5 IP internal Web page by entering **http://x.x.x.x/nortxe\_index.html**, where x.x.x.x is the IP address used in step 1.
2. Select the **Configuration** tab and then select **Firmware Upgrade** from the left side menu as shown below.



3. Browse to the directory specified during setup. The default location is **C:\Program Files\Extron\Firmware\System\_5\_IP\Patch**.
4. Select the patch file **503512V100.S19**, then click **Upload** to initiate the process.

### Step 3: Verify the patch

5. To verify that the patch is applied to your device, use Telnet (see **step 1** on page 13 for details) and enter the SIS command **\*Q**.

This returns the current firmware version in the following format: **x.yy.zzzz** where **x.yy** matches the value from **step 1, C**, on page 13. The value for **zzzz** should display as **0007**.

**NOTE** Telnet may not connect right away because the patch installation and reboot process take some time to finish. It may be up to 2 minutes before a connection is complete.

### Step 3: Upgrade the firmware.

You can now load firmware version 2.00.

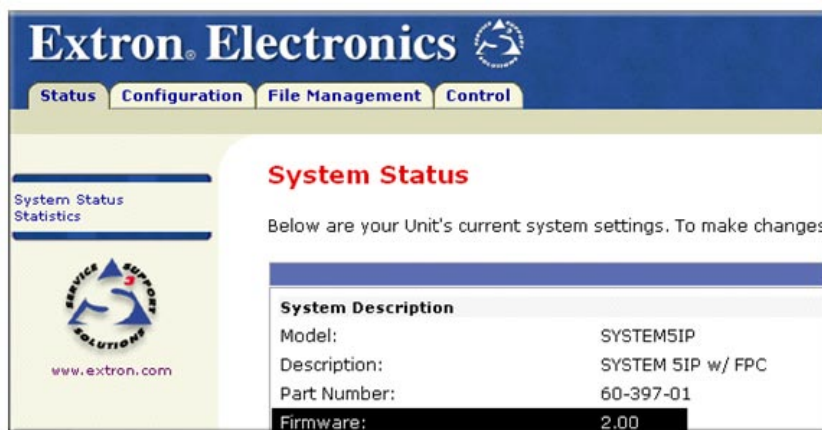
1. Select the **Configuration** tab and then select **Firmware Upgrade** from the left side menu.
2. Browse to the directory specified during setup; the default location is **C:\Program Files\Extron\Firmware\System\_5\_IP\0x**.
3. Select the firmware file **System\_5\_IP\_19\_1335\_50\_V2\_00.S19**, then click **Upload** to initiate the process.

**NOTE** It may take time for the firmware to load and initialize, so the Web page may not return right away. This does not indicate a problem; wait 30-45 seconds and click the **Status** tab again.

4. Once the upload is complete, enter the **EscZY reset** command via Telnet or RS-232.

**Step 4: Verify the update.**

1. On the Web page, click the **Status** tab and confirm that the version is **2.00**.



**NOTE** *It may take time for the firmware to load and initialize, so the Web page may not return right away. This does not indicate a problem; wait 30-45 seconds and click the **Status** tab again.*

2. Close the browser, or repeat steps 1 through 4 to update additional System 5 IP switchers.