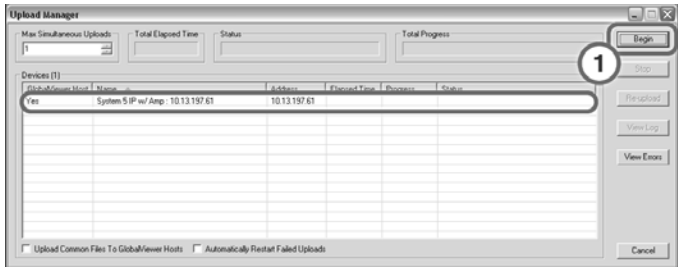


Upload Manager page before file upload

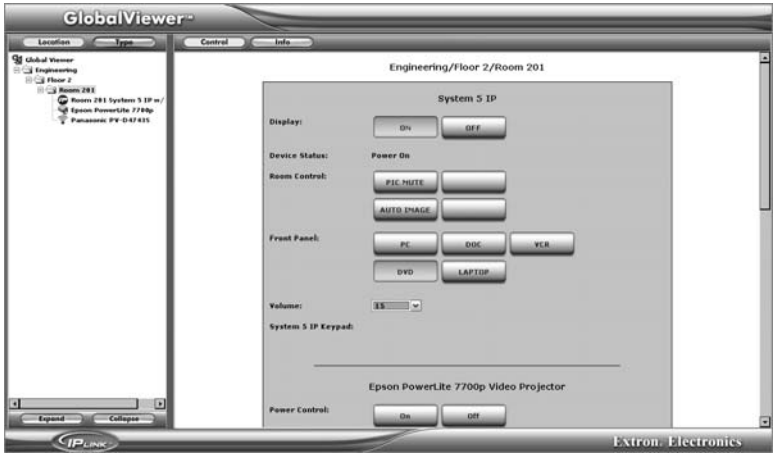
To begin the upload:

1. Click **Begin**. The status bar indicates the success of the upload.
2. Click **Close**.

   The configuration should now be successfully uploaded to the appropriate product(s).

Accessing GlobalViewer

After uploading a configuration file to a System 5 IP switcher, you can access the GlobalViewer pages by opening a Web browser and entering the host name and the IP address of the product in the **Address** field. Alternatively, you can right-click on the System 5 IP switcher icon in the IP Link tree and select **Open Webpage**.



GlobalViewer main page

安全须知 • 中文

这个符号提示用户该设备用户手册中有重要的操作和维护说明。

这个符号警告用户该设备机壳内有暴露的危险电压，有触电危险。

注意

阅读说明书 • 用户使用该设备前必须阅读并理解所有安全和使用说明。

保存说明书 • 用户应保存安全说明书以备将来使用。

遵守警告 • 用户应遵守产品和用户指南上的所有安全和操作说明。

避免追加 • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

警告

电源 • 该设备只能使用产品上标明的电源。 设备必须使用有地线的供电系统供电。 第三条线（地线）是安全设施，不能不用或跳过。

拔掉电源 • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统的电源线。

电源线保护 • 妥善布线， 避免被踩踏，或重物挤压。

维护 • 所有维修必须由认证的维修人员进行。 设备内部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。

通风孔 • 有些设备机壳上有通风槽或孔，它们是用来防止机内敏感元件过热。 不要用任何东西挡住通风孔。

锂电池 • 不正确的更换电池会有爆炸的危险。 必须使用与厂家推荐的相同或相近型号的电池。 按照生产厂的建议处理废弃电池。

Step 10: Building and Uploading a Configuration

Your project file compiles all the configuration data (port assignments, product/device locations, scheduling data, etc.) you have created in Global Configurator, and it builds the GlobalViewer Web pages.

Building a configuration

To build a configuration:

1. Click the **GlobalView** button at the bottom of the IP Link tree (left pane) to open the **GlobalView Designer.**
2. Confirm that all configured products have been given a location, and make changes if necessary. Save your project file. If a project file has not been saved, GC prompts you to do so before building the configuration.
3. From the **Build** menu, choose **Build All Configurations** or **Build Changed Configurations**.

Build Menu

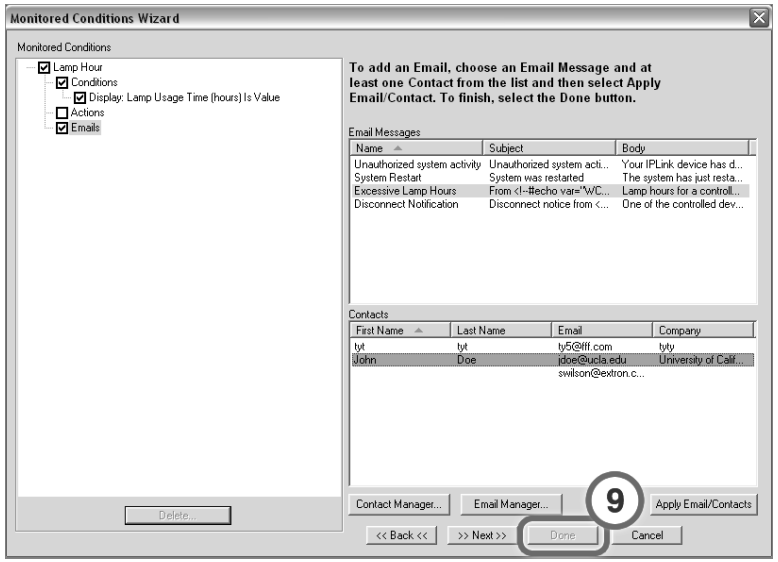
An activity bar appears, indicating that the build is progressing. The Upload Manager window appears when the build is complete.

4. Proceed to upload your files using the Upload Manager.

Uploading a configuration

The process of uploading your project file is essential to successfully creating a GlobalViewer Web page. You can upload one project file configuration at a time or several at once.

The Upload Manager appears only after a build has been successfully performed on at least one device. If errors occur during the build of any devices, a dialog box appears listing the errors. After the build is complete, the Upload Manager appears.



Display lamp hour e-mail notification

9. Click **Done**. The dialog box closes.

Step 9: Creating a Display Disconnection E-mail

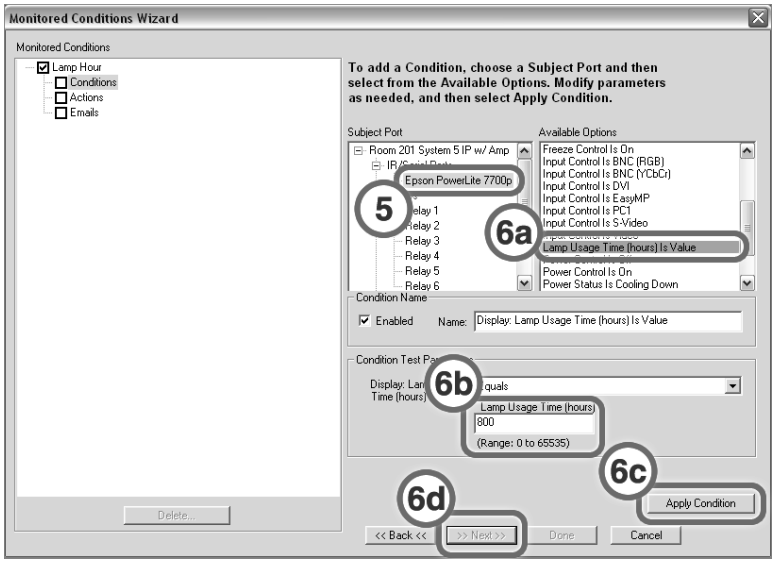
To set a display disconnected e-mail alert:

1. Click the **Monitor** tab in the Global Configurator window.
2. Click **Add Monitor** below the **Monitored Conditions** window. The **Monitored Conditions Wizard** window appears.
3. Enter a name (e.g., **Disconnected**) in the **Enter Monitored Condition Name** field area. The label now appears in the left pane.
4. Click **Next** to specify a condition.
5. Select the desired equipment (e.g., **Epson PowerLite 7700p**) from the **Subject Port** window and **Connection Status Is Disconnected** from **Available Options**.
6. Click **Apply Condition** for each condition assigned, and click **Next**.
7. Click **Next** again to add an e-mail notification.
8. Highlight the appropriate e-mail message and contacts, and click **Apply Email/Contacts**.
9. Click **Done**. The dialog box closes.

Table of Contents

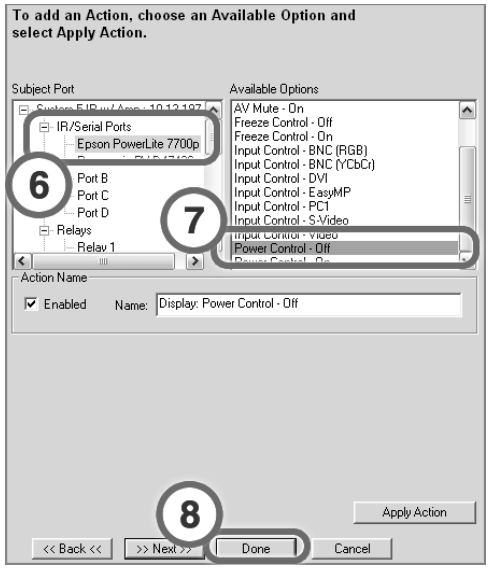
68-1228-01 Rev **A**
03 06

4. Click **Next** to specify a condition. This takes you to the actions page, where you can specify the action.



Monitored Conditions Wizard window

5. In the **Subject Port** window, select the display (e.g., **Epson PowerLite 7700p**) for which the lamp hour warning is to be set. A list of monitoring options appears under the **Available Options** window.
6. Set the lamp hour limit by doing the following steps:
   a. Choose **Lamp Usage Time (hours) Is Value** under the **Available Options** window.
   b. Enter a value (i.e., 800) in the **Lamp Usage Time** box.
   c. Click **Apply Condition** for each condition assigned.
   d. Click **Next**.
7. Click **Next** again to add an e-mail notification.
8. Click on the appropriate e-mail message and contacts, and click **Apply Email/Contacts**.



Display shutdown action selection page

6. Select the device to be scheduled (e.g., **Epson PowerLite 7700p**) from the **Subject Port** window.
7. Select the action, **Power Control Off** from **Available Options** window, and click **Apply Action**.
8. Click **Done**. The dialog box closes.

Step 8: Creating a Display Lamp Hour Warning E-mail

Global Configurator's monitoring feature enables you to configure a System 5 IP switcher to monitor many parameters of the connected display devices. For example, a monitor alert can warn a school administrator if a display lamp hour limitis close to expiration, or a display is inexplicably disconnected from the System 5 IP switcher.

To set a display lamp hour warning e-mail:

1. Click the **Monitor** tab in the Global Configurator window.
2. Click **Add Monitor** button below the **Monitored Conditions** window. The **Monitored Conditions Wizard** window appears.
3. Enter a name (e.g., **Lamp hour**) in the **Enter Monitored Condition Name** field area. The label now appears in the left pane.

Chapter One

Introduction

About this Manual

This setup guide allows you to easily and quickly set up and configure your System 5 IP switcher. The step by step instructions show you how to set up the hardware first, then use the Global Configurator program to add serial and IR drivers, configure the front panel buttons, set a shutdown schedule, and set up e-mail alerts for display disconnection as well as lamp hours warnings.

About the System 5 IP Series Switchers

The Extron System 5 IP switchers are five input, one output, active, audio/video (A/V) switchers capable of controlling a projector and various other items such as lights, a projector lift, or a screen motor. Throughout this manual they are referred to as the System 5 IP, the switcher, or System 5.

Four models are available:

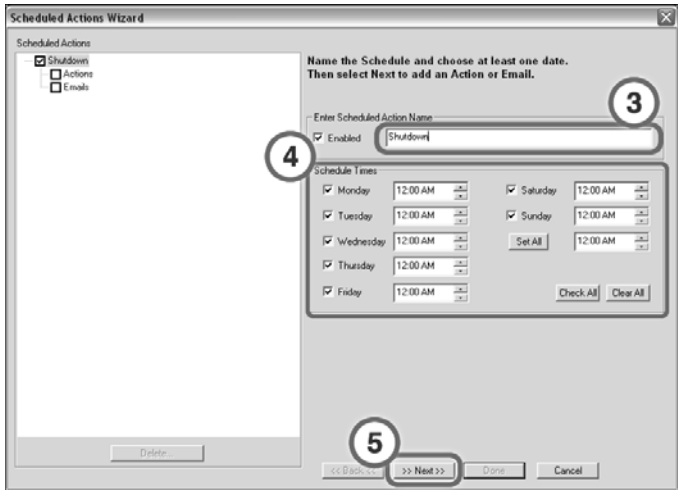
- **the Front Panel Controller (FPC) models,** which include front panel controls for projector power, selectable functions/room control, input selection, volume adjustment, and simple configuration
  - with an audio amplifier (amplifier model)
  - without an audio amplifier (nonamplifier model)
- **the non-FPC models,** which have no front panel controls except an input 5 selection button
  - with an audio amplifier (amplifier model)
  - without an audio amplifier (nonamplifier model)

Step 7: Creating a Display Shutdown Schedule

Global Configurator's (GC) scheduling feature enables you to schedule actions and events for a selected port device. Scheduling is often useful for setting a projector or other device to shut down or turn on at a predetermined time (e.g., in a school, all projectors can be set to power off at 8:00 P.M.).

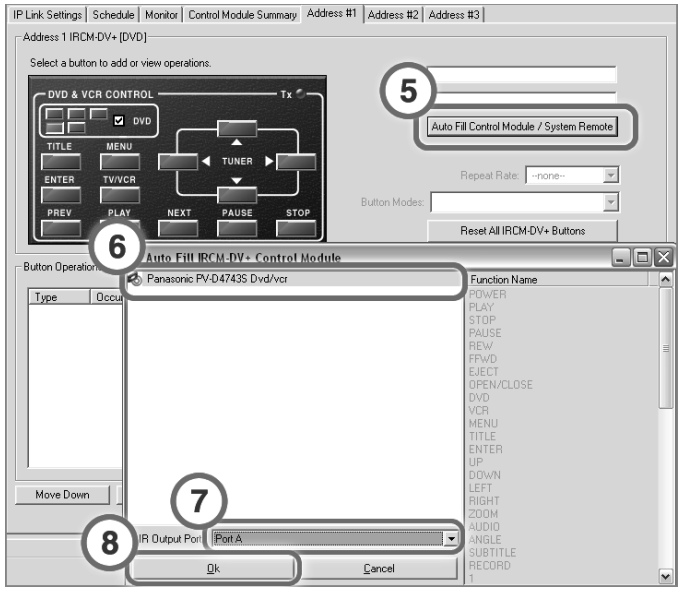
To schedule a display shutdown:

1. Click on the **Schedule** tab in the Global Configurator window.
2. Click the **Add Schedule** button below the **Scheduled Actions** window. The **Scheduled Actions Wizard** window appears.



Scheduled Actions Wizard page

3. Enter a name (e.g., **Shutdown**) in the **Enter Scheduled Action Name** field.
4. Indicate the time for the desired action. Click the **Set All** button if the event occurs daily.
5. Click **Next**. This takes you to the actions page, where you can specify the action.



Control Module configuration

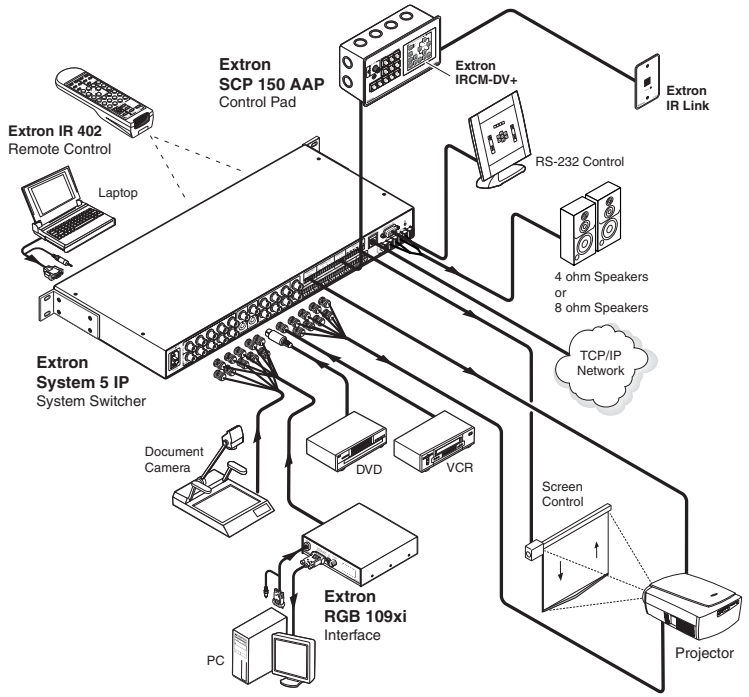
NOTE *You must have an applicable IR driver installed to use* **Auto Fill**.

6. Select an IR driver (e.g., Panasonic PV-D4743S DVD/VCR) from the **Auto Fill** pop-up box. All functions for the selected driver appear in the **Function Name** window.
7. Select an **IR Output Port** (e.g., **Port A**) from the respective menu.
8. Click **OK**. The dialog box closes. All commands that match a button on the module are assigned to that button. Red triangles on the buttons of the control module indicate that all the matching buttons have been auto-filled.
9. Repeat the above steps to configure **Address 2 IRCM-DV+[VCR]**.

NOTE *In step 2, you will need to select a different input button in the VCR half of the control module button.*

NOTE *If using an IRCM-DV+, you must associate each half with an input.*

The System 5 IP offers two methods of projector and source device control: RS-232 or infrared (IR). The switcher can learn IR signals from remote controls to communicate with sources such as VCRs and DVD players. Users can create their own IR device drivers or go to the Extron Web site to obtain device drivers.



A typical application for a System 5 IP switcher with integrated audio amplifier

About Global Configurator

Extron Global Configurator (GC) software is an application that allows non-programmers to configure a wide range of Extron IP Link®-enabled products, and create entire GlobalViewer™ systems. It provides an integrated environment for defining A/V control and system monitoring functionality from an easy-to-use graphical user interface. It allows you to configure a single room controller as well as facilitate building a Web-based asset management and remote monitoring system for hundreds of A/V devices in multiple locations.

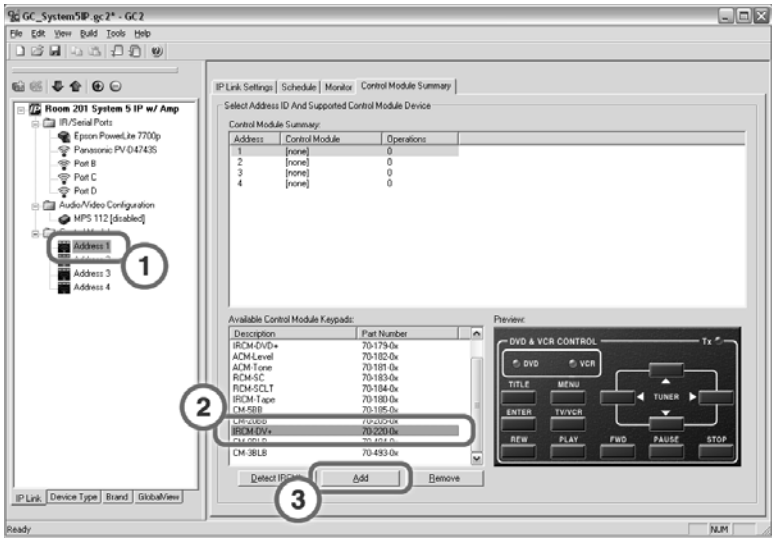
Global Configurator provides the following features for the System 5 IP:

Offline configuration—Using the Global Configurator, you can configure your System 5IP switcher without having the actual device on hand, eliminating the need to connect your System 5 IP before starting the configuration.

GlobalViewer Web pages—GlobalViewer™ Web pages (HTML, XML, and JavaScript) allow you to control and manage devices such as VCRs, DVDs, and displays connected to an Extron System 5 IP. These pages are generated when you build and upload your project files in GC. GlobalViewer can be viewed using Microsoft Internet Explorer® (version 6 and above) from any computer with access to the network.

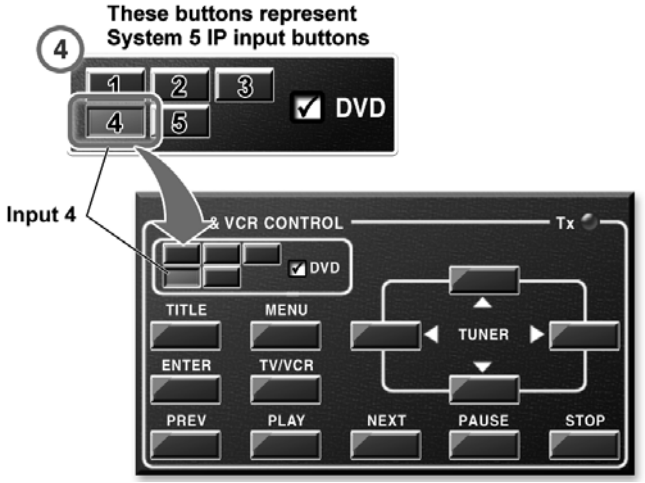
System Requirements

- Intel® Pentium® III processor or later with at least a 1 GHz clock speed
- Microsoft® Windows NT, Windows 2000, Windows XP, or later operating system
- Microsoft Internet Explorer 6.0 or later
- 512 MB of RAM
- 50 MB of hard disk space
- A network connection with a minimum data transfer rate of 10 Mbps



Control Module main window

4. In the upper left corner of the picture of the IRCM-DV+, click on the **Input 4** button, as shown below. This associates the DVD functions whenever input 4 is selected.



Input 4 button selection

5. In the Control Module configuration window, click **Auto Fill Control Module**. A dialog box appears.

2. Select the operation type, **Driver**.
3. Select the display port, **Epson PowerLite 7700p**.
4. From the **Command Name** pull-down menu, select **Power Control**, and set **Command** to **On**.
5. From the **Occurs When** selection box, choose **Released**, and click **OK**.
6. To configure the **Off** button, repeat these steps.

Step 6: Configuring the Control Modules Using the Auto Fill Feature

Control modules are optional hardware keypads that can be used to trigger IR and serial control commands. Once added to the system, each button must have a function associated with it.

The Auto Fill feature automatically associates the correct IR commands with control module buttons for the selected IR driver. For example, the Play command is automatically assigned to the **Play** button.

1. Select **Address 1** beneath the folder called "Control Modules" in the System 5 IP tree view.

NOTE *Global Configurator automatically recognizes any control module currently connected to the switcher. The IRCM-DV+ will appear at Address 1 & 2 or Address 3 & 4. If Address x IRCM-DV+ [DVD] is already shown in the System 5 IP tree view, skip 2 & 3, and proceed to 4.*

2. Select IRCM-DV+ in the **Available Control Module Keypads** section.
3. Click **Add**, then click **OK** to add the IRCM-DV+ module.

Installing the Software

Before getting started with the Global Configurator, you must install the software. The configuration software is available at no charge via the Extron Web site.

To install the software on your hard drive:

1. Go to the **www.extron.com** and click **Download**.
2. From the **Find Downloads** product selection menu, choose **Global Configurator,** and click **Submit**.
3. Click the respective program files to install both Global Configurator and the IP Link® Driver Package.

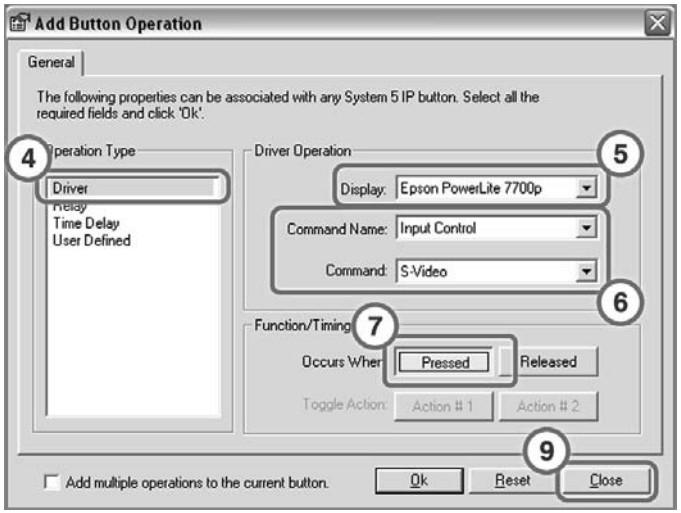
NOTE *Global Configurator 2.1 is the minimum version required to configure the System 5 IP products.*

The program wizard walks you through the entire process. By default, the installation creates directories and places in them folders, icons, and files for Global Configurator, drivers, and help.

Updating Firmware

Extron periodically updates product firmware in conjunction with the release of new software revisions. When updating any Extron software to the latest revision level, please be sure to read the supplied release notes, or contact an Extron Application Engineer to determine if your Extron product also requires a firmware update.

NOTE *For more information regarding how to update the firmware, refer to Appendix B in the* System 5 IP Series User's Manual.

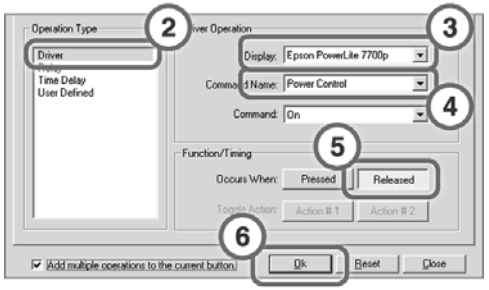


Add Button Operation dialog box

4. Select the operation type, **Driver**.
5. Select the display port, **Epson PowerLite 7700p**.
6. From the **Command** name pull-down menu, select **Input Control** and set command to **S-video**.
7. From the **Occurs When** selection box, choose **Pressed** (if desired, you may choose **Released**), and click **OK**.
8. Repeat steps 5-7 to add additional button operations.
9. Click **Close** to close the dialog box.

Configuring the On button

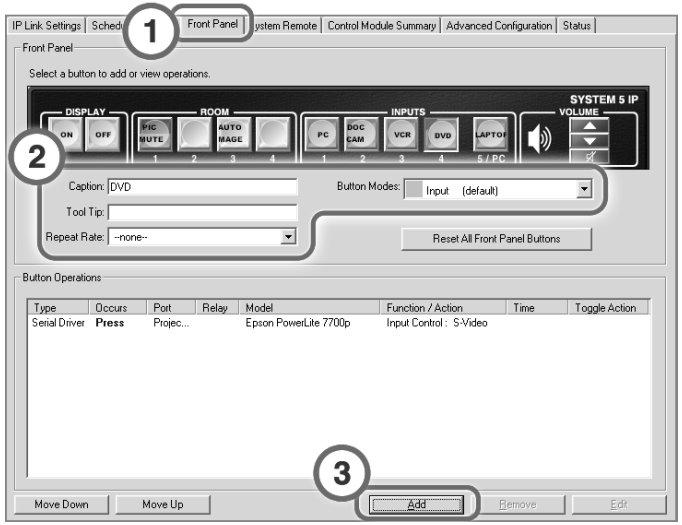
1. In the **Front Panel** window, click on the switcher's **On** button and click **Add** to add a button operation. Alternatively, you can right-click on the chosen button.



On-button configuration box

Step 5: Configuring the Front Panel Buttons

Once the device drivers have been loaded, you can configure each of the front panel buttons. For this exercise, you will configure Input and On/Off buttons. Additionally, you can modify a button caption, add a tool tip, set repeat rates, and select button modes.



Front Panel window with configured buttons

Configuring an Input button

1. Select the **Front Panel** tab and choose the input button (e.g., **DVD**) to be configured.
2. Set the button mode, repeat rate, caption, and tool tip if applicable.
3. Click on the **Add** button or right-click on the **DVD** input button to add an operation. The **Add Button Operation** dialog box appears.

NOTE *To add multiple operations to a button, select "Add multiple operations to the current button."*

Chapter Two

System 5 IP Hardware Setup

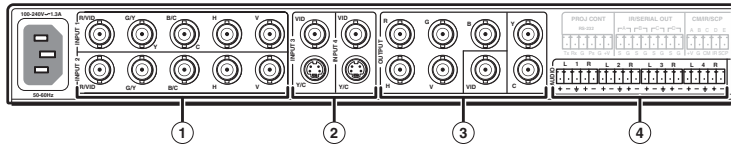
Rear Panels and Cabling

Front Panel Features and Basic Operation

System 5 IP Hardware Setup

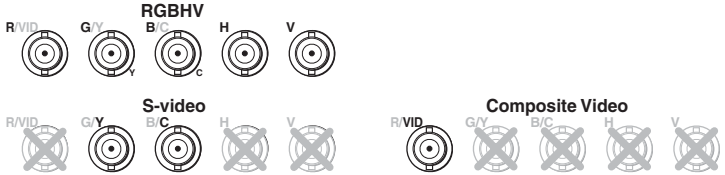
This chapter describes rear and front panel features and basic front panel operation of the System 5 IP switcher. It shows you how to connect the cables to audio, video, and control connectors.

Rear Panels and Cabling



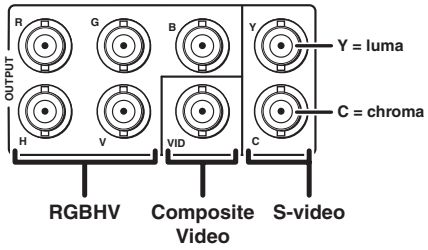
A/V input and video output connections

① **Inputs 1 and 2: RGBHV/S-video/composite video inputs** — Connect cables from an RGBHV, S-video, or composite video source to each of these inputs. See the diagrams below. Inputs must be configured for either video or RGB. See chapters three, four, and five in the *System 5 IP Series User's Manual* for details.



② **Inputs 3 and 4: S-video/composite video inputs** — Connect the cable from either an S-video (Y/C) source (using the 4-pin mini DIN connector) or a composite video source (using the BNC connector) to each of these inputs. Inputs 3 and 4 are not configurable.

③ **Display outputs** — Cable these output BNC connectors to an RGBHV, S-video (Y/C), or composite video port on the projector or display. See the diagram below.



System 5 IP video outputs

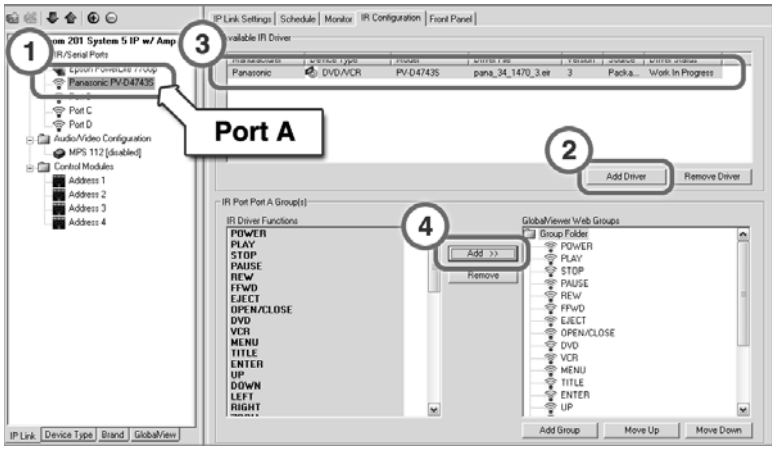
Adding an IR driver

To add an IR driver to a port:

1. Select the IR port labeled **Port A** beneath the System 5 IP tree view.
2. Under the IR Configuration tab, click the **Add Driver** button.
3. Use the drop-down menus under **Device Driver Filters** to select the manufacturer, device type and version. For this example, select the **Panasonic PV-D4743S DVD/VCR** IR driver. Click **OK**.
4. To have the IR driver functions available on the GlobalViewer Web page, select the desired functions (e.g., **Power**) and click **Add**.

NOTE *If you are unable to find the correct driver in the drop-down menu, or the Extron Web site, you can "learn" the command using the IR Learner software. You can download this software from the Extron Web site download center. Refer to the* ***IR Learner User's Guide*** *for instructions on how to use this software.*

This populates the **IR Driver Function** field with available driver functions.



Add IR driver window

Step 4: Adding Serial and IR Device Drivers

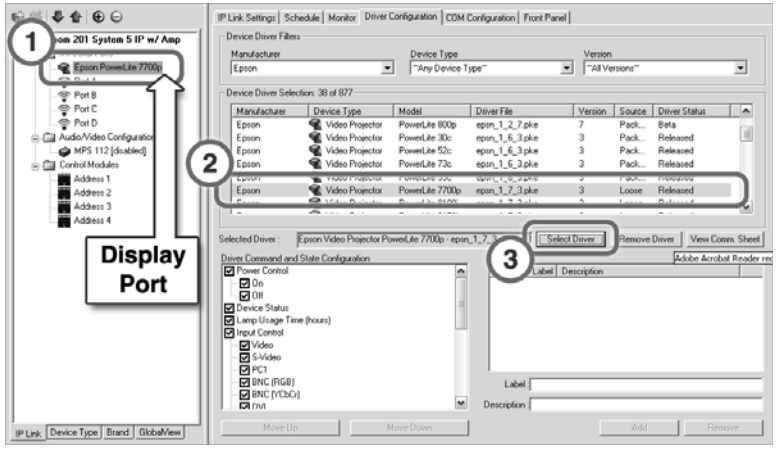
Drivers are associated with IR/Serial ports from a list of available drivers on the Driver Configuration or IR Configuration tabs. Device drivers allow System 5 IP switchers to control other devices, such as displays, VCRs, DVDs, etc.

Adding a serial driver

To add a serial driver:

1. In the IP Link tree window (left pane), select the System 5 IP display port.
2. Use the drop-down menus under **Device Driver Filters** to select the manufacturer, device type, and version. For this example, select the **Epson PowerLite 7700p** video projector driver in the **Device Driver Selection** window.
3. Click the **Select Driver** button. The Epson projector appears in the IP Link tree window.

   This populates the **Selected Driver** field with driver information and fills the **Driver Command and State Configuration** field with predefined groups (functions, etc.).



Add serial driver window

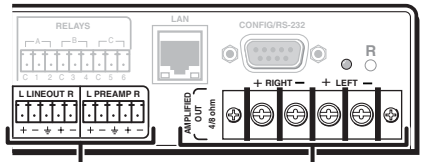
④ **Audio inputs** — These inputs correspond to the like-numbered video inputs. For each input, connect the cable from a balanced or unbalanced stereo or mono audio input source. See the wiring diagrams below.

Unbalanced Stereo Input (high impedance)

Balanced Stereo Input (high impedance)

NOTE *After the audio inputs and outputs are connected, see chapters three and four in the* System 5 IP Series User's Manual *for instructions on how to adjust the per-input audio levels.*

Audio output connections



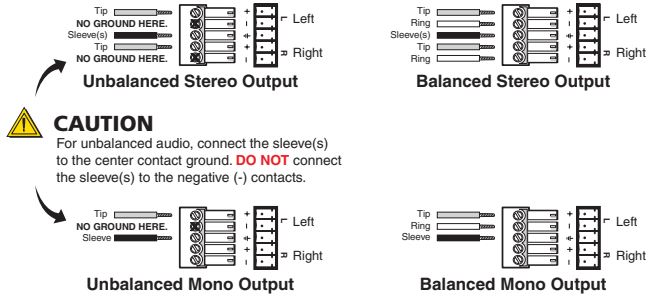
① **Lineout and Preamp audio outputs** — Connect an audio output device to either connector for line level audio outputs. The Lineout and Preamp audio outputs are simultaneously active. Therefore, two devices can be connected at the same time (one to each output).

- The **Lineout** connector outputs a fixed level audio signal that is not affected by audio adjustments.
- The **Preamp** connector outputs a variable, line level audio signal for use with a powered amplifier. The volume can be controlled (attenuated) via the front panel knob, RS-232, or Ethernet/IP communication. The volume range is 0 (mute) through 40 steps (0% through 100% of the maximum volume).

Lineout and Preamp outputs can both be wired as unbalanced or balanced (see diagram). Only the Preamp output has the -10dBV/+4dBu options.

- **Unbalanced, -10 dBV (-8 dBu, 320 mVrms)** — the default, for consumer level devices such as VCRs, DVD players, and stereo receivers

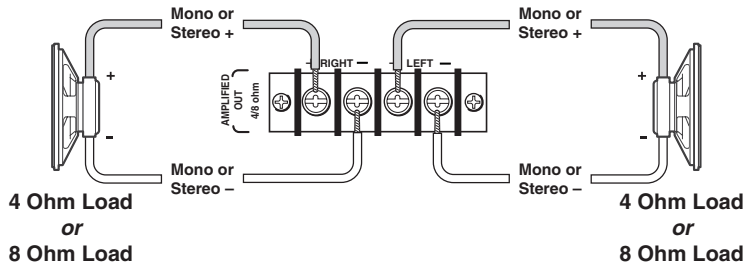
- **Balanced, +4 dBu (+6 dBV, 1.23 Vrms)** — for professional devices such as mixers, signal processors, and power amps



CAUTION *Connect the sleeve to ground. Connecting the sleeve to a negative (-) terminal will damage the audio output circuits.*

② **Amplified output** (for models with an integrated audio amplifier only) — The switcher's internal, 40-watt (20 watts per channel into a 4 or 8 ohm load) audio amplifier outputs stereo (default) or dual mono signals on a four-position screw terminal connected to nonpowered speakers. Cable speakers to this screw terminal for a 20 watts (rms) per channel amplified audio output.

1. Use the appropriate wiring for the load as shown in the following illustration.



2. Using the front panel, RS-232, or IP control, set the switcher for either mono or stereo audio output. That setting affects the amplified output and the Preamp output.

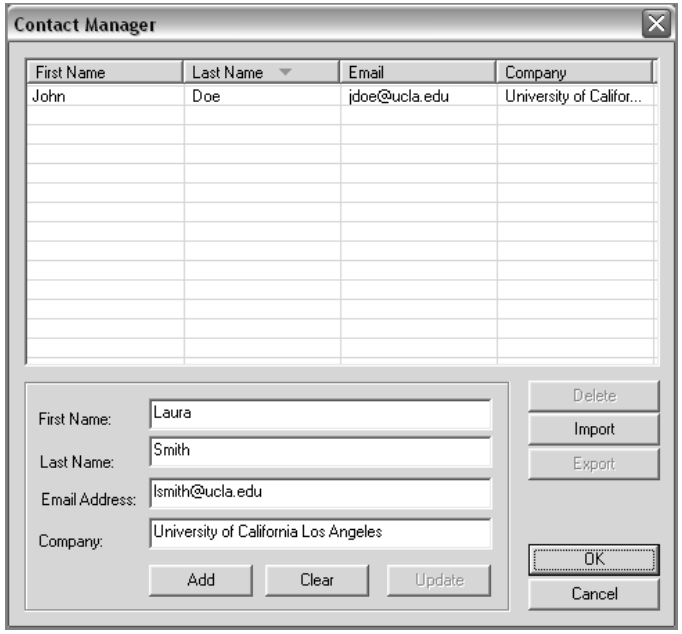
CAUTION *Do not short the terminals to ground or the amplifier will be damaged.*

CAUTION *Do not bridge the outputs. Bridging could damage the amplifier.*

Adding e-mail contacts

To add e-mail contacts:

1. From the **Edit** menu, choose **Contact Manager**. A dialog box appears.



Contact Manager dialog box

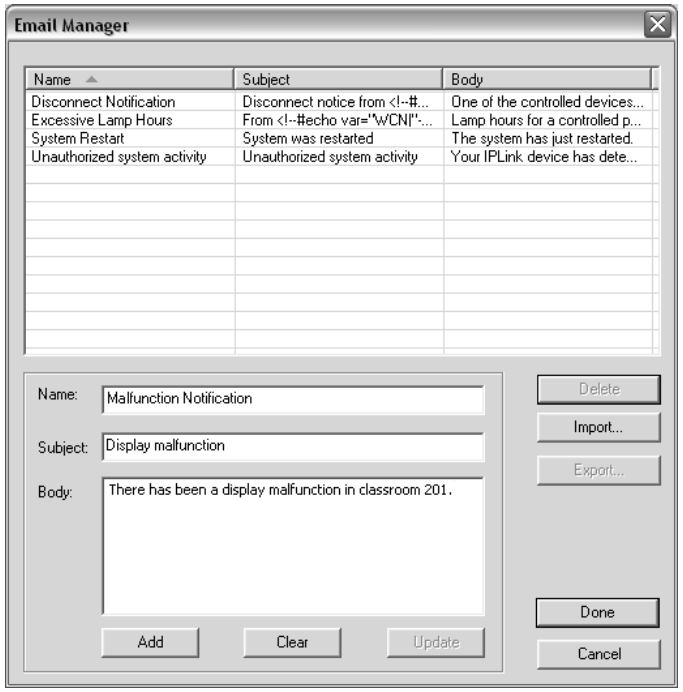
2. Fill in the name, e-mail address, and the company areas of the **Contact Manager** dialog box.
3. Click **Add** to add the newly-created contact to the list.
4. Click **OK** to close the dialog box.

Setting up e-mail notifications

The Email Manager provides preset messages for the most common actions.

To set up an e-mail notification for a specified action:

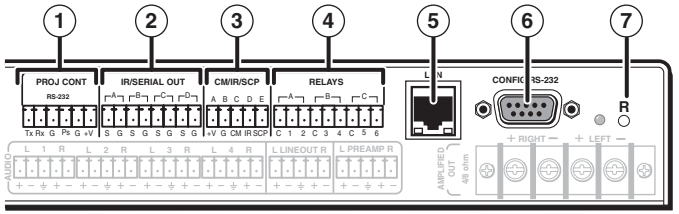
1. From the Global Configurator **Edit** menu, choose **Email Manager**. The **Email Manager** dialog box appears, as shown below.



Email Manager dialog box

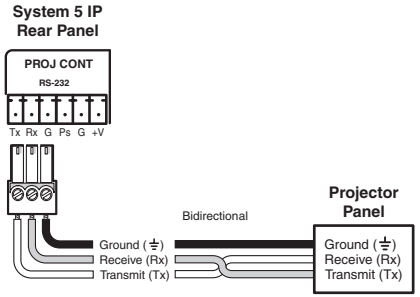
2. To create a custom notification e-mail, fill in name, subject, and body sections in the **Email Manager** dialog box, and click **Add**.
3. Click **Done** to close the dialog box.

Control connections



① **Projector control RS-232 port** — Commands from a downloaded projector driver or user-defined command strings entered via the Global Configurator program can be sent to the display device from this port.

For bidirectional communication, the transmit (Tx), ground (G), and receive (Rx) pins must be wired at both the switcher and the projector.

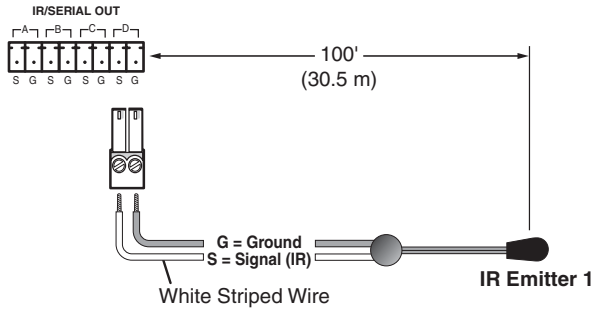


NOTE *Each projector or display may require different wiring. For details, refer to the manual that came with the projector.*

NOTE *Extron recommends the use of shielded communication cables such as CTL (Comm-Link cable).*

② **IR/Serial Output ports** — These ports output either infrared signals or unidirectional RS-232 signals for controlling various devices such as VCRs and DVD players. Each port must be set up via Global Configurator for either IR or RS-232 communication and associated with a device driver.

For infrared (IR) output, wire an IR Emitter **(2 emitters, maximum, per port)** as shown below for a modulated signal and ground.



See the *System 5 IP Series User's Manual* for details on how to set up these ports for IR or RS-232 control.

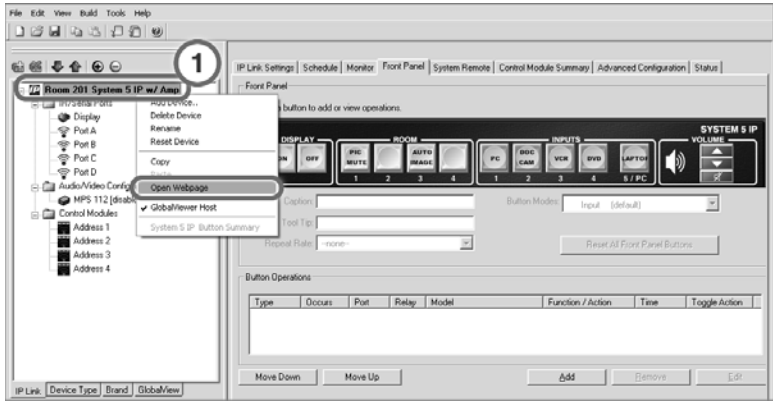
③ **CM/IR/SCP port** — You can connect up to four Extron control modules (IRCMs, ACMs, RCMs), one Extron IR Link infrared signal repeater, and/or up to two Extron SCP 150 control pads to this port to allow remote control of the System 5 IP switcher or other items. A maximum of seven devices can be connected to this port.

The SCP 150 Secondary Control Panel replicates most of the switcher's front panel controls. The SCP 150 can receive IR signals from an optional IR 402 remote control and send them to the switcher. Control modules can be used to control VCRs, DVD players, tape decks, a projector lift, or screen control. Refer to the appropriate device's user's manual.

The control modules, IR Link, and SCPs can be daisy chained, as shown in the following diagram. Extron CTL (Comm-Link) cable is recommended for these connections. Use the following diagram as a wiring guide.

3. Fill in information for the gateway IP address and subnet mask and click **Submit**.
4. From the left navigational bar in the **System Settings** window, click on **Email Alerts**. In the **Email Alerts** view, fill in information for the e-mail IP address and domain name. Click **Edit** and close the Web page.

E-mail Alerts dialog box

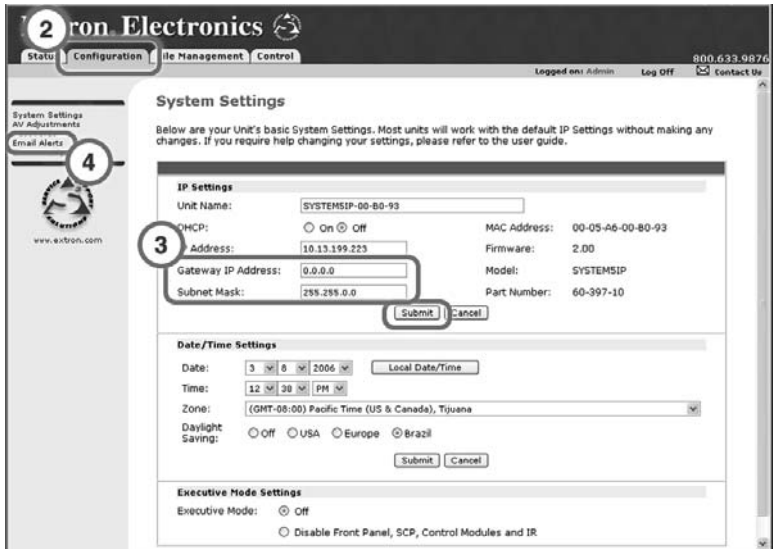


Global Configurator main window

Adding IP settings and domain name

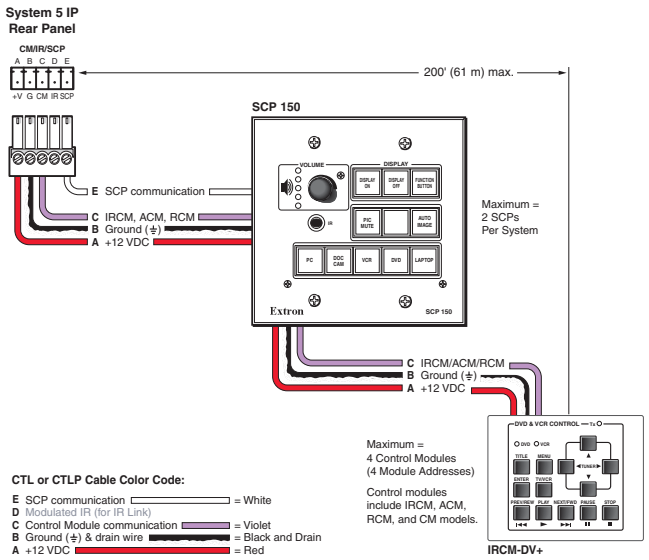
To add IP settings and domain name:

1. In the Global Configurator main window, right-click on the System 5 IP in the IP Link tree (left pane), and select **Open Webpage** to bring up the default Web page.



Embedded Web page System Settings window

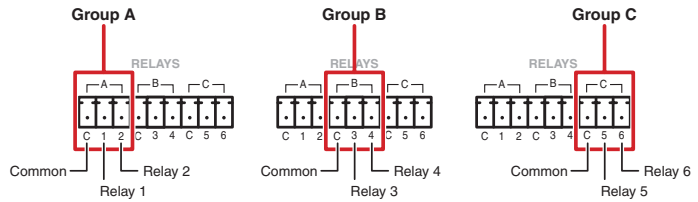
2. Click the **Configuration** tab. The Global Configurator System Settings window appears.



NOTE *The maximum total distance between the System 5 IP and a connected device is 200' (61 m).*

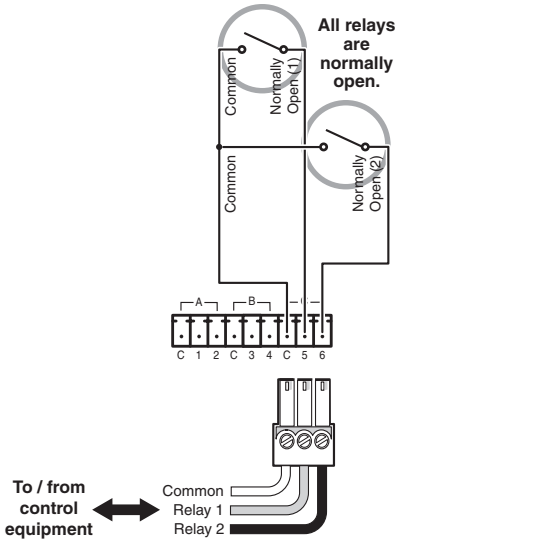
NOTE *Extron recommends that you connect the cable's drain wire to the ground pin at both ends. This reduces EMI interference.*

④ **Relay ports** — Via the Global Configurator, each relay can be associated with a front panel button (projector on/off buttons, function buttons, or input selection buttons) or can be operated independently.

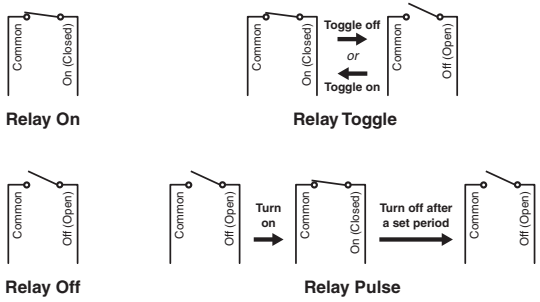


These relays are normally open by default. They can be configured via SIS commands or the Global Configurator to operate as follows:

- **on**—relay closes and stays closed until otherwise instructed
- **off**—relay opens and stays open until otherwise instructed



- **toggle**—relay changes from open to closed or from closed to open until otherwise instructed
- **pulse**—momentary (timed) (press to turn on, timeout to turn off)

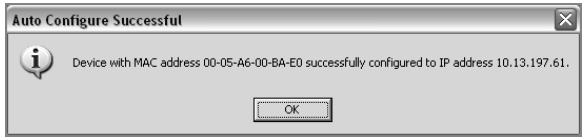


You can also use SIS commands or the Global Configurator to specify pulse duration.

⑤ **LAN connector and LEDs** — An Ethernet connection can be used on an ongoing basis to control the System 5 IP (and the devices connected to it) in an Ethernet network.

Configure the settings for this port via either SIS commands or the Global Configurator. See *System 5 IP Series User's Manual* for details.

5. Select **Auto Configure IP Address** to activate the **MAC Address** box, and enter the MAC address of your System 5 IP switcher. The MAC address (00-05-A6-xx-xx-xx) is located on the upper right corner of the switcher's rear panel.
6. Click **Set**. A confirmation, pop-up window appears. Click **OK** to close the pop-up window.



Auto Configure Successful box

7. Click the **New Location** button in the upper right corner of the **Add Device** dialog box. A **Location** folder is created.
8. Assign a location-oriented name to the folder, such as **Engineering,** and highlight the desired folder (e.g., **Room 201**). The System 5 IP controls and device drivers will automatically load to the highlighted folder. For up to 8 levels of location, follow the same procedures. Once finished, click **OK**. The Global Configurator main window appears, as shown in page 3-6.

NOTE *This GlobalViewer configuration can be saved at any time by selecting the File menu,* **Save As**.

Step 3: Adding IP and E-mail Settings

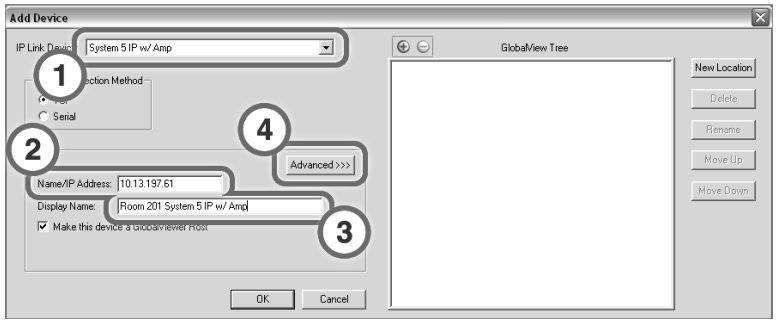
Global Configurator supports scheduling, monitoring, and e-mail alerts for connected devices, such as a video projector. A schedule can be created to shut down the projector at a predetermined time to create an e-mail alert to warn a school administrator if the projector lamp hour is nearing expiration.

In order to utilize these features, the following parameters must be set: IP address, gateway IP address, subnet mask, mail IP address, and domain name.

NOTE *If these features are not needed, skip this section entirely and proceed to* Step 4, Adding Serial and IR Device Drivers.

NOTE *Please contact your MIS Network Support Team to obtain the required IP and e-mail settings.*

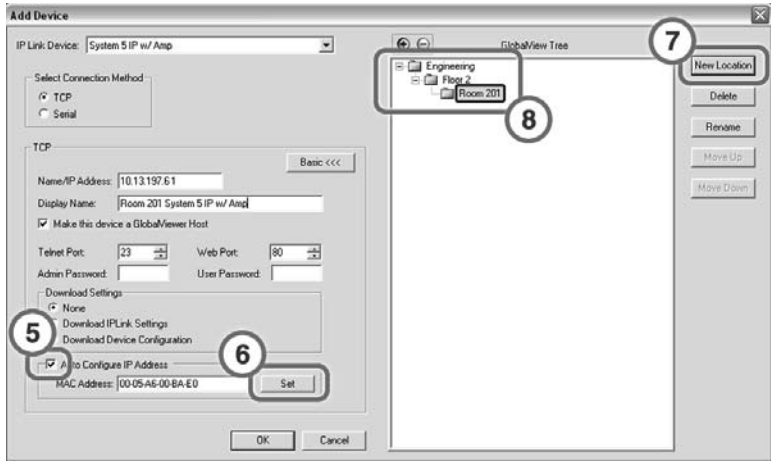
Step 2: Adding a System 5 IP Switcher and a GlobalView Tree



Add device dialog box (Basic)

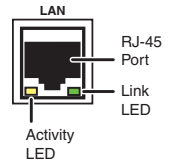
To add a System 5 IP switcher to Global Configurator:

1. From the **IP Link Device** drop-down menu, select **System 5 IP w/Amp** or **System 5 IP** (without amp).
2. Enter or edit the host name or IP address in the **Name/IP Address** text box so that it matches the one assigned to the product by the network administrator.
3. In the **Display Name** box, enter a descriptive name (e.g., **Room 201 System 5 IP w/Amp**) that would be easy for you to remember. You may choose to keep the default name.
4. Click the **Advanced** button.



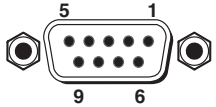
Add Device dialog box (Advanced)

LAN port defaults:
- **switcher's IP address:** 192.168.254.254
- **gateway's IP address:** 0.0.0.0
- **subnet mask:** 255.255.0.0
- **DHCP:** off



⑥ **Configuration/RS-232 port** — For switcher configuration and control via RS-232, connect to the 9-pin HD connector.

RS-232 protocol:
- **38400 baud**
- 1 stop bit
- no parity
- 8 data bits
- no flow control



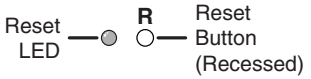
DB9 Pin Locations Female

The pin assignments of this connector are as follows:

Pin	RS-232 function	Description
1	–	No connection
2	Tx	Transmit data
3	Rx	Receive data
4	–	No connection
5	Gnd	Signal ground
6	–	No connection
7	–	No connection
8	–	No connection
9	–	No connection

The front panel 2.5 mm mini stereo connector **Config** port serves the same function as this rear panel port but is independent from it. You can use the Extron 9-pin D to 2.5 mm stereo mini TRS RS-232 cable (part #70-335-01).

⑦ **Reset button and LED** — Pressing this recessed button causes various IP functions and Ethernet connection settings to be reset to the factory defaults. See chapter two in the *System 5 IP Series User's Manual* for details.



Front Panel Features and Basic Operation

A System 5 IP can be set up and operated by using:

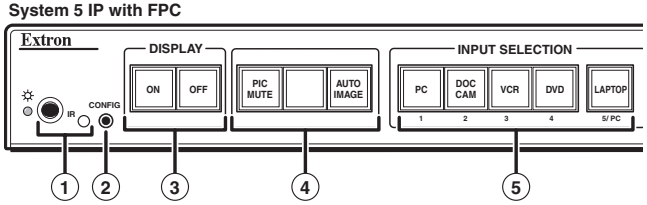
- The front panel controls.
- An Extron control pad, such as the SCP 150, or SCP 150 AAP.

Most settings can be adjusted only through a host computer using Extron's Simple Instruction Set™ (SIS™) or Extron's Global Configurator. For details on setup and control via RS-232 or Ethernet, see chapters four and five in the *System 5 IP Series User's Manual*.

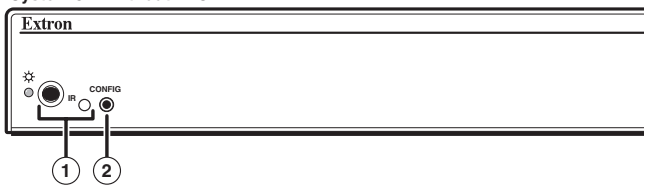
NOTE *Switcher settings can be adjusted via the front panel.*

NOTE *Any control settings must be adjusted via the Global Configurator.*

System 5 IP with FPC



System 5 IP without FPC

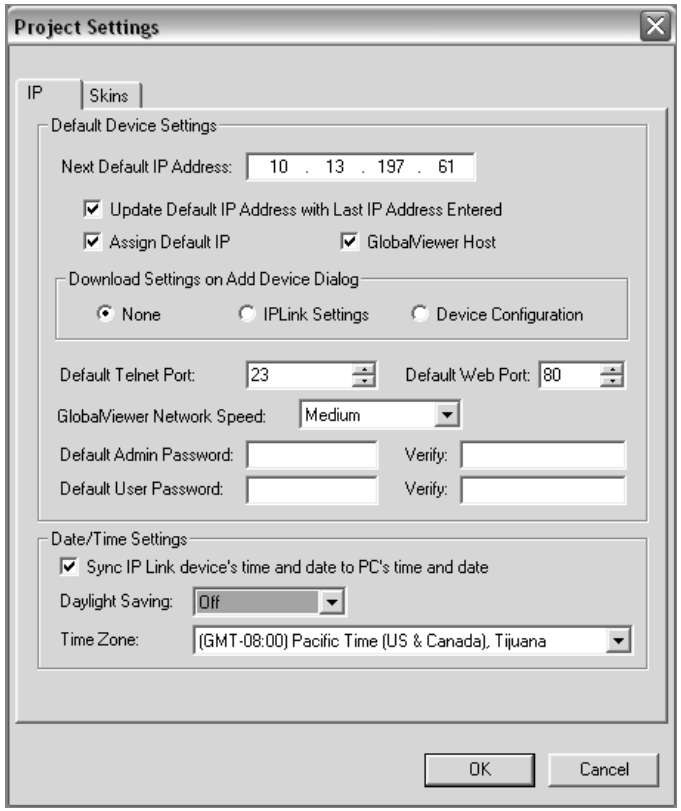


Control ports

① **IR receivers** — The larger infrared receiver (on the left) accepts IR signals from the Extron IR 402 infrared remote control for controlling the switcher.

Use the smaller receiver (on the right) for receiving and "learning" codes from other devices' remote controls. The System 5 IP uses learned IR signals to control devices such as VCRs or DVD players. See the user manual for IR learning procedures. This receiver accepts infrared signals from 30 kHz to 62 kHz.

② **Config port** — This port is a front panel version of the rear panel Configuration/RS-232 port, and it is independent of the rear panel port.



Project Settings dialog box

4. If passwords have been set on the System 5 IP, enter the administrator and user passwords. Ensure that both passwords are repeated in the **Verify** fields.

NOTE *If a password has been set on the System 5 IP switcher but none is entered here, you will be unable to upload a new configuration. By default, there is no password set on the switcher.*

5. Click the **Sync IP Link device's time and date to PC's time and date** check box and fill in the appropriate Daylight Saving time zone values in the menu drop boxes, if necessary.

6. Click on the **Skins** tab, and from the **Available Skins** drop-down menu choose a skin of your choice. Click **OK**. The **Add Device** dialog box appears.

System 5 IP Software Setup

This chapter shows you how to configure your System 5 IP switcher using the Global Configurator software. You will configure the switcher's front panel Input and On buttons to control a video projector. You will also configure an IRCM-DV+ control module to control the functions of a combination DVD/VCR player. In addition, this chapter includes examples of projector shutdown scheduling, lamp hour warning alerts, and projector disconnection e-mail alerts.

Following are the steps to getting started using the Global Configurator software. Each step is described in detail in the subsequent sections of this chapter.

1. Create new project settings.
2. Add a System 5 IP switcher and a GlobalView tree.
3. Add IP and e-mail settings.
4. Add serial and IR device drivers.
5. Configure the front panel buttons.
6. Configure the control modules using the Auto Fill feature.
7. Create a display shutdown schedule.
8. Create a display lamp hour warning e-mail.
9. Create a display disconnection e-mail.
10. Build and upload a configuration.

Step 1: Creating New Project Settings

To launch Global Configurator:

1. Double-click the **Global Configurator** icon.

2. Check the device driver directory to see if you have the necessary drivers. From Global Configurator, you can download the necessary drivers. Alternatively, you can always download new drivers from **www.extron.com**. Restart Global Configurator (GC) after downloading them.

NOTE *The drivers must be downloaded to the directory where the Extron driver package is installed. The default is:* **C:\Program Files\Extron\Driver2**.

3. Select **Create A New Project** and click **OK**.

   The **Project Settings** dialog box appears.

Buttons

The System 5 IP with FPC (front panel control) has backlit buttons, and the non-FPC model has an unlit input 5 selection button only. The button caps are removable so the button labels can be changed.

③ **Projector On/Off buttons** — After they have been configured, press the On button to turn the display device on, and press the Off button to power it off. Only one of these two buttons can be selected (active) at once. Via the Global Configurator, other functions and relays can be associated with each of these buttons.

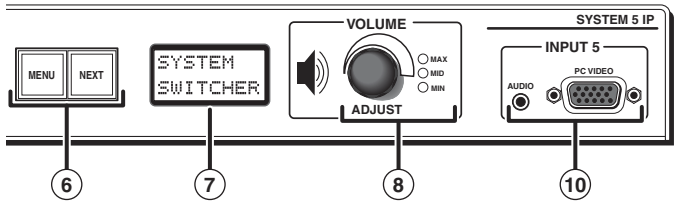
④ **Function/room control buttons** — These buttons can be set up to control the switcher's relays, and they can also be set up to execute IR or RS-232 commands of your choice.

⑤ **Input selection buttons** — Press one of these buttons to select the desired audio and video input. The button lights brighter and remains lit while an audio-video input is selected.

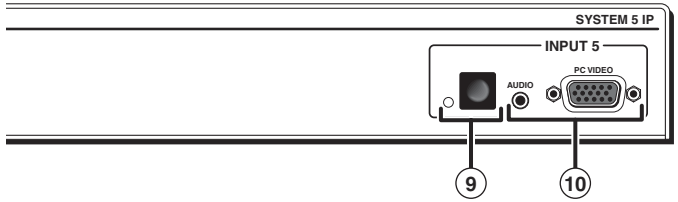
⑥ **Menu and Next buttons** — Press these buttons to access and navigate through the switcher's LCD menus and options. They are not user programmable/configurable. For details, see "LCD Menus and Basic Switcher Setup" in the user manual.

NOTE *If you adjust volume, gain, bass, treble, etc., it takes 1 minute 40 seconds (100 seconds) for data in the switcher's RAM to be saved to flash memory.*

System 5 IP with FPC



System 5 IP without FPC



⑨ **Input 5 selection button (non-FPC model only)** — Press this button to switch to input 5. Press this button again to deselect input 5 and return to the previously selected input.

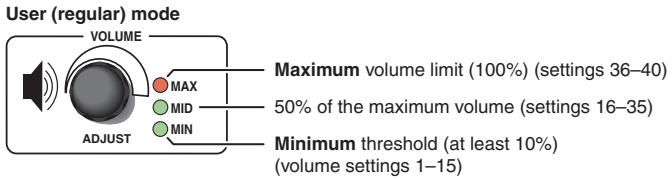
⑩ **Input 5** — These connectors accept computer-video and stereo audio input signals.

Indicators

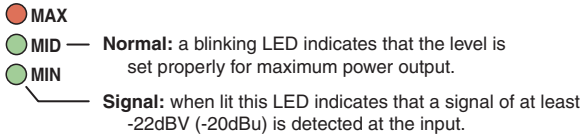
⑦ **LCD screen** — This screen displays basic system status, menu, and configuration information. You will use it primarily during switcher configuration.

⑧ **Volume/Adjust knob and Min/Mid/Max LEDs** — Rotate this knob to adjust the volume when the switcher is in regular user mode, and use it to select options from menus in switcher setup mode. The LEDs indicate different things depending on the mode (user or setup) the switcher is in.

- In the user (regular) mode the LEDs function as volume level indicators. Rotate the Volume knob to adjust the output level of the Preamp and Amplified outputs. The volume range is 0 to 40 steps, which is displayed as 0% to 100% in the configuration software.



- In setup mode these LEDs function as input level indicators. Rotate the Volume knob and observe the LEDs to set up the proper audio input levels. See chapter two in the *System 5 IP Series User's Manual* for details.



NOTE *If the Max/Clip LED lights, the audio may be clipped.*

NOTE *Per-input audio level settings can be adjusted via this front panel knob or via RS-232/Telnet/Web browser control.*

Chapter Three

System 5 IP Software Setup