

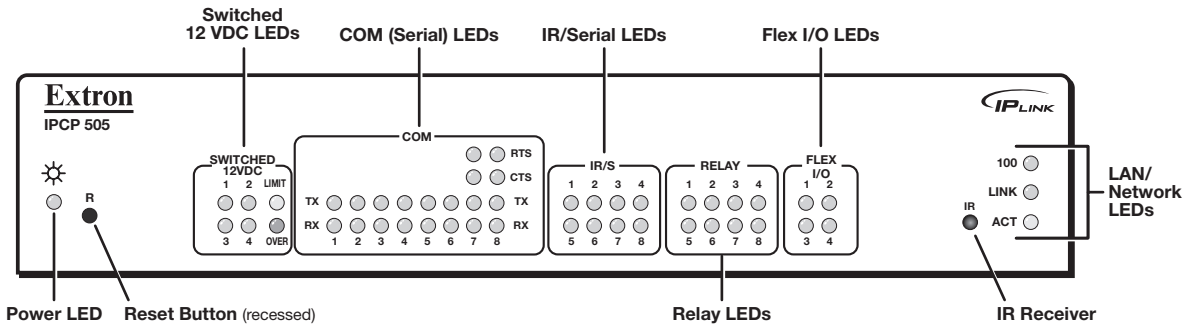
IMPORTANT:
Refer to www.extron.com for the complete user guide and installation instructions before connecting the product to the power source.

IPCP 505 • Setup Guide

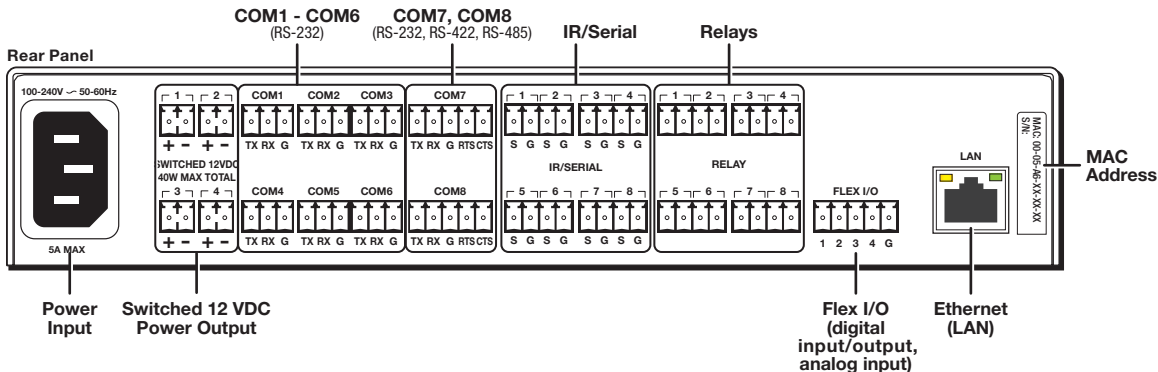
The Extron IPCP 505 IP Link® Control Processor integrates Ethernet connection into AV systems to allow users to remotely control, monitor, and troubleshoot AV equipment, including display devices and switchers. It includes an embedded web server, multiple bidirectional serial ports, switched low voltage power output ports, relays, and configurable flex I/O ports for use in applications that require control and monitoring of multiple devices within a large-scale AV system.

The IPCP 505 is configured using the free Extron Global Configurator (GC) software. The IPCP 505 integrates seamlessly with Extron GlobalViewer® Enterprise (GVE) software and the free GlobalViewer web-based AV resource management for remote control applications. The IPCP 505 supports multiple TouchLink® touchpanel interfaces over a standard Ethernet network. Global Configurator and other useful software applications are available at www.extron.com.

Front Panel Features



Rear Panel Features



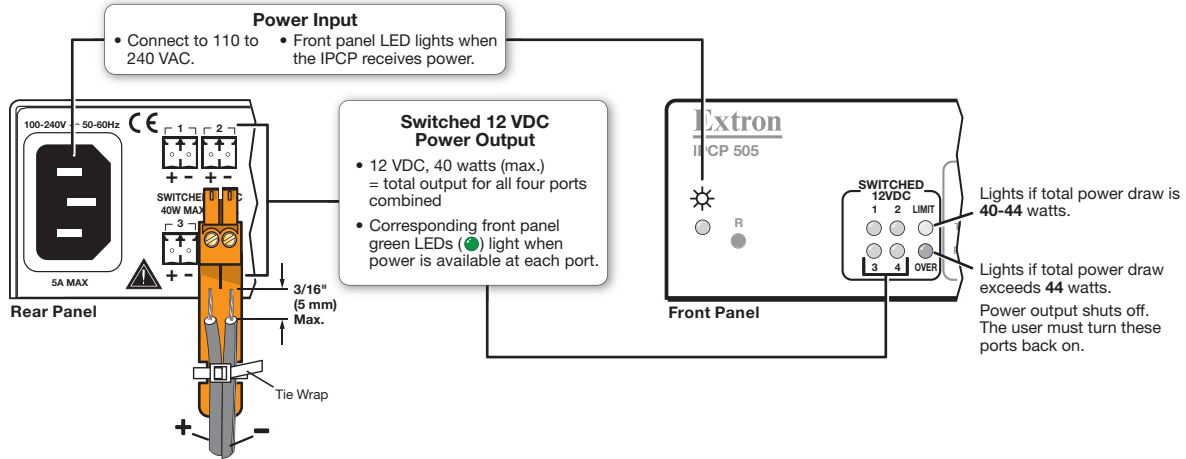
IPCP 505 • Setup Guide (Continued)

Cabling and Features

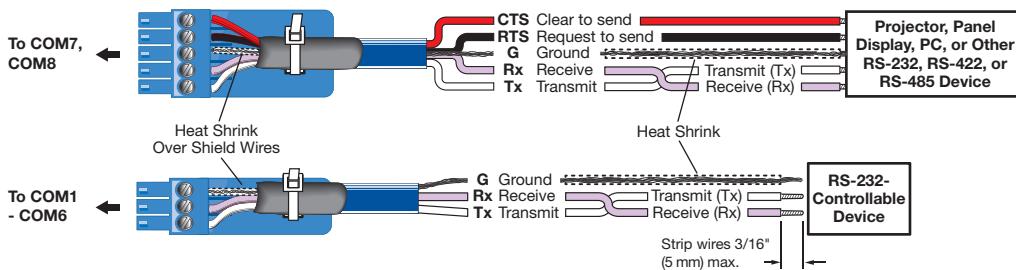
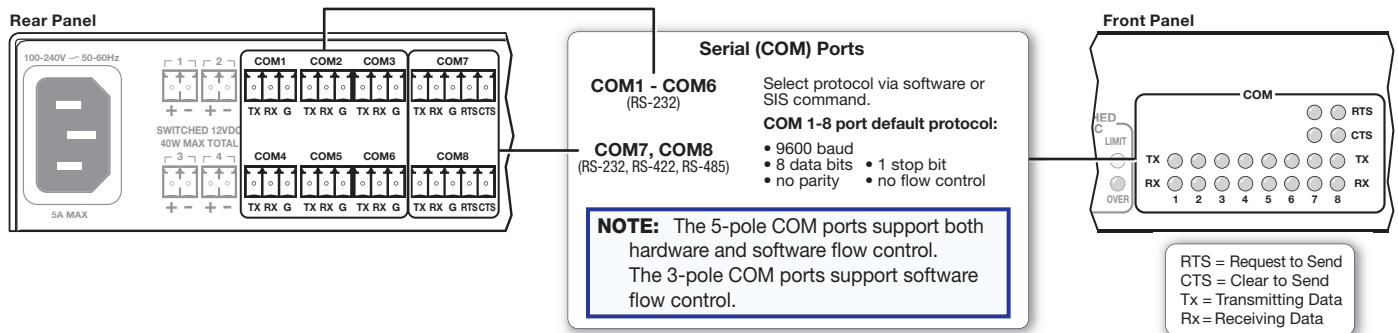
Attach cables using the following wiring diagrams as a guide. Full details are available in the *IPCP 505 User Guide*.

ATTENTION: Installation and service must be performed by authorized personnel only.

Power



Control – Serial (COM)

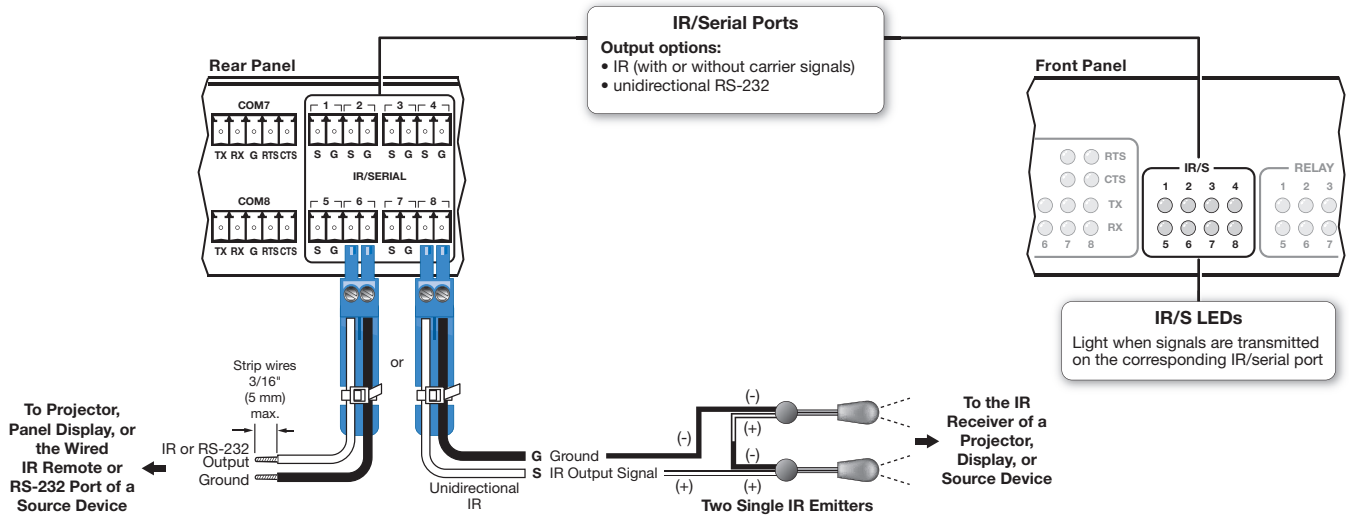


NOTE: If you use cable that has a drain wire, tie the drain wire to ground at both ends.

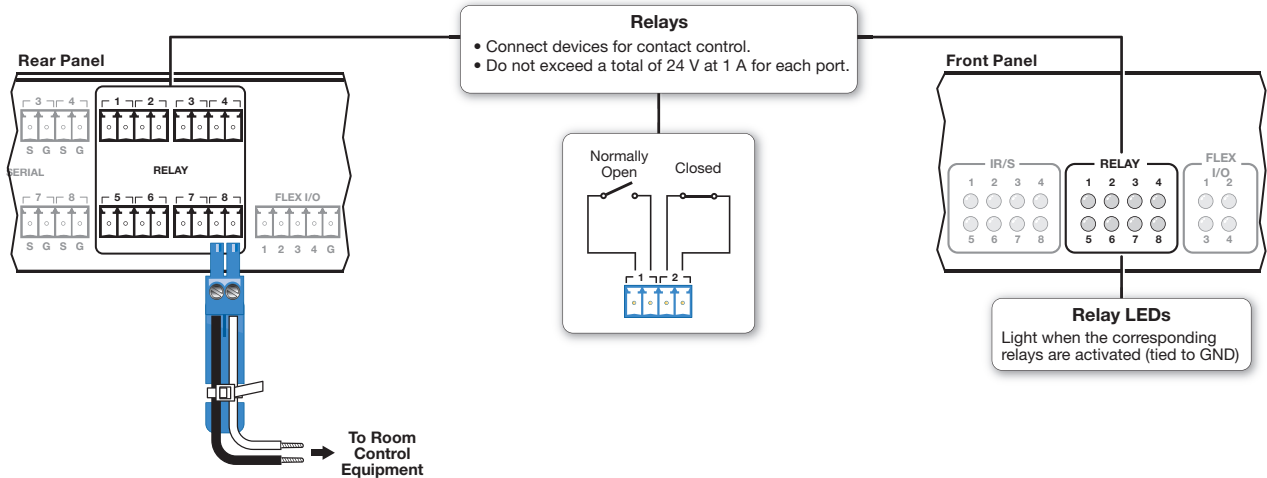
COM7, COM8 Pin Configurations

Pin	RS-232	RS-422	RS-485
1 (Tx)	Tx	Tx-	Data- (pins 1 & 2 tied together)
2 (Rx)	Rx	Rx-	
3 (G)	Ground	Ground	Data+ (pins 4 & 5 tied together)
4 (RTS)	RTS	Tx+	
5 (CTS)	CTS	Rx+	

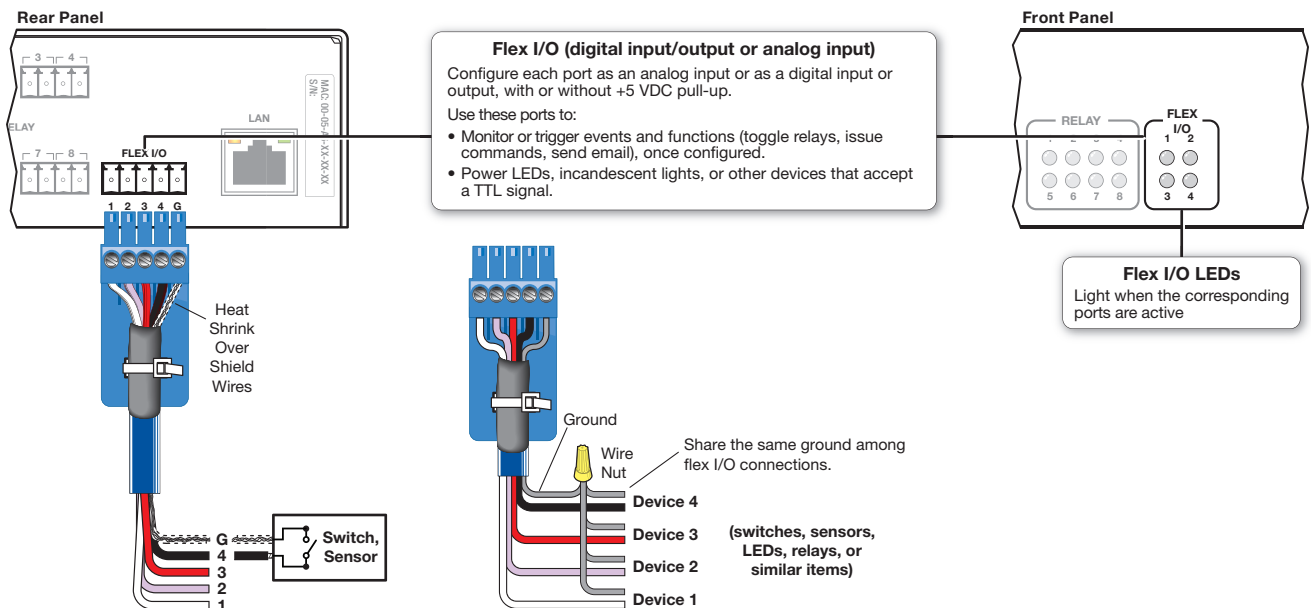
Control – IR/Serial



Control – Relay

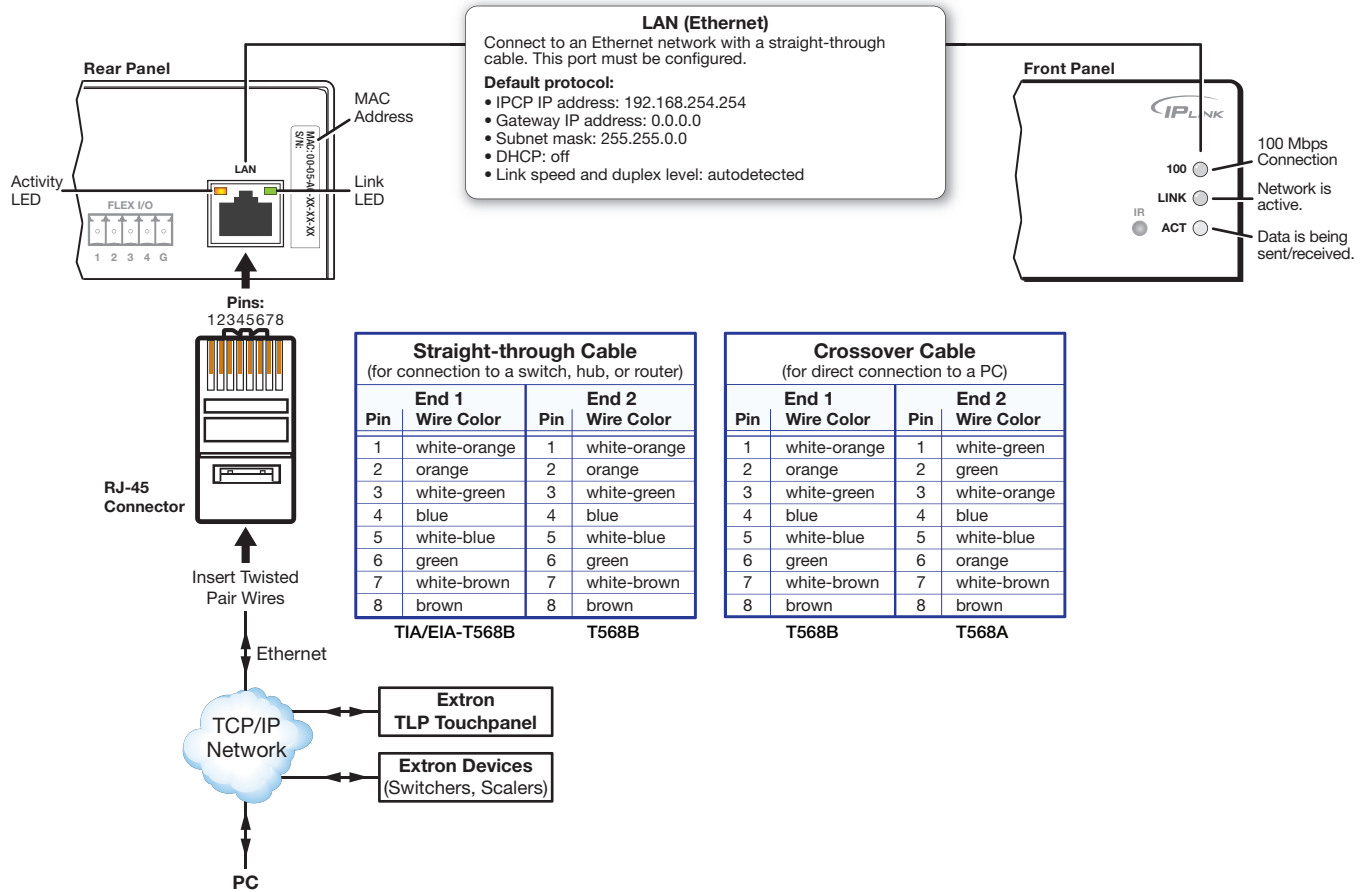


Control – Flex I/O



IPCP 505 • Setup Guide (Continued)

Control – LAN (Ethernet)



About Global Configurator (GC)

What It Does

Global Configurator is the software tool for setting up an IPCP and the system it controls. Global Configurator:

- Loads device drivers and uses commands from them as you desire for controlling other products
- Creates a single configuration file containing all the settings for the IPCP and the products with which it interacts in the AV system
- Generates a graphical user interface called GlobalViewer that is uploaded to the IPCP (a GlobalViewer host device) along with the completed configuration and can be accessed as a web page

Using GlobalViewer, users can manage, monitor, and control Extron and third-party equipment such as projectors, displays, computer monitors, VCRs, and DVD players.

What To Set Up in GC

Use GC software to create a configuration that tells the IPCP how its ports will function; how to control other products; which touchpanels to interact with; what to monitor; when to do things; and whom to notify, how, and under what circumstances.

Configuration

1. Download and install the latest versions of the following:
 - **Global Configurator software** — for setting up the IPCP and creating a single system configuration file
 - **Device driver package** — for use with GC, to make control of other devices possible
 - **GUI Configurator software** — for configuring Extron TLP touchpanels

All are available from www.extron.com or on the Extron Software Products Disc.

ATTENTION: Use Global Configurator version 3.2 or later. Update all PCs and devices running earlier versions of GC.

2. Obtain IP address and subnet mask information for the IPCP from the network administrator.
3. Cable devices to the IPCP 505 (see [Cabling and Features](#) on page 2), connect touchpanels to the same network as the IPCP, then power on all the devices.
4. Connect the IPCP to a network, power it on, and use ARP (see [Network Configuration Using ARP](#) below) to set the IP address for the unit.
5. Use GUI Configurator to set up TLP touchpanels. You will need to upload the touchpanel configuration to Global Configurator when you set up the IPCP. Also read the setup and user guides for the model of TLP used in the system.
6. Using Global Configurator, create a project, configure the IPCP 505 and other IP Link devices, and upload the configuration to the IPCP.
7. Launch the GlobalViewer interface and test the configuration and the system.

NOTE: Additional information and step-by-step instructions on configuration tasks are available in both the *Global Configurator Help* file and the *GUI Configurator Help* file. The *Global Configurator Help* file includes an introduction to the software and how to start a GC project.

Resources

Obtaining Control Drivers

Extron provides an extensive selection of device drivers in the driver package available on the Extron website. If the system requires a control driver that is not part of the driver package, you have additional options:

- Request a new serial (RS-232) driver from Extron.
- Create your own custom IR device driver using Extron IR Learner software. Follow the directions in the *IR Learner Help* file to create a driver by using the remote control for that device and the IR receiver port on the front panel of the IPCP 505.

Instructions, Information, and Assistance

A checklist of basic setup steps is provided at the end of this guide. For additional information see the help files and the *IPCP 505 User Guide*, available at www.extron.com.

If you have questions during installation and setup, call the [Extron S3 Sales & Technical Support Hotline](#) or the [Extron S3 Control Systems Support Hotline](#).

Configuring for Network Communication

Network Configuration Options

When you power on the IPCP for the first time, you have a choice of several ways to set up the IP address:

- **Use the ARP (address resolution protocol) command** — see the instructions below.
- **Use a Web browser** — see the *IPCP 505 User Guide*.
- **Use the Global Configurator software** — see the *Global Configurator Help* file.
- **Use SIS commands via Telnet** — see the *IPCP 505 User Guide*.

Network Configuration Using ARP

Use ARP to configure the IP address as follows:

1. Obtain a valid IP address for the IPCP from the network administrator.
2. Obtain the MAC address of the IPCP from the label on its rear panel. The MAC address should have this format: 00-05-A6-xx-xx-xx.
3. Connect the PC and the IPCP to the same subnetwork.
4. At the PC, access the command prompt, then enter the arp -s command. Type in the desired new IP address for the unit and the MAC address of the unit (listed on the rear panel of the IPCP). For example:
arp -s 10.13.197.7 00-05-A6-03-69-B0
5. Execute a ping command by entering “ping” followed by a space and the new IP address at the command prompt. For example:
ping 10.13.197.7

The response should show the new IP address, as shown in the figure at right.

```

C:\WINDOWS\system32\CMD.exe
C:\>ping 10.13.197.7
Pinging 10.13.197.7 with 32 bytes of data:
Reply from 10.13.197.7: bytes=32 time<1ms TTL=64
Reply from 10.13.197.7: bytes=32 time<1ms TTL=64
Reply from 10.13.197.7: bytes=32 time<1ms TTL=64
Reply from 10.13.197.7: bytes=32 time<1ms TTL=64
Ping statistics for 10.13.197.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
  
```

Mounting

Securely mount the IPCP and other devices and attach cables using the preceding wiring section as a guide. Optional 1U rack shelves (such as the RSU 129 1U 9.5" Deep Universal Rack Shelf and the RSB 129 1U 9.5" Deep Basic Rack Shelf) are available for use with the IPCP. Read the instructions and UL guidelines that come with the rack shelf or mounting kit for installation procedures.

Setup Checklist: How to Proceed With Installation

Get Ready

- Familiarize yourself with the features of the IPCP 505.
- Download and install the latest version of the Extron Global Configurator (GC) software and the latest driver package (available from www.extron.com or on the Extron Software Products Disc.)
- Obtain IP setting information for the IPCP from the network administrator.
- Obtain model names and setup information for devices the IPCP will control.

Perform Physical Installation

- Mount the unit to a rack.
- Cable devices to ports on the IPCP 505.
- Connect power cords and turn on the devices in the following order: output devices (projectors, monitors, speakers), the IPCP, a PC (for setup) or touchpanel (for control after configuration), then all input devices (such as DSS and cable boxes).

Configure the IPCP

- Connect the PC and the IPCP 505 to the same Ethernet subnetwork and use ARP via Telnet, Extron DataViewer, or a similar application to configure the IPCP for network communication.
- Connect any Extron TLP touchpanels that will be part of the system to the same network as the PC and IPCP. Create a user interface layout for the touchpanels and upload the GUI configuration to each touchpanel. See the *GUI Configurator Help* file for instructions.
- Create a new GC project and configure the IPCP 505. See the *Global Configurator Help* file.
- Test the system.

If you have questions during installation and setup, you can call the [Extron S3 Sales & Technical Support Hotline](#) or the [Extron S3 Control Systems Support Hotline](#).

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