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

IPA T RLY4 • Setup Guide

This guide provides instructions for an experienced installer to install the Extron IPA T RLY4 relay accessory and to make all connections.

The IPA T RLY4 is an IPLink® Accessory product. The relay accessory consists of four output relays with normally open (when the relay is de-energized) (NO) and normally closed (NC) contacts.

The relay accessory converts a solid state (up to 12 VDC) signal, from a source such as the Flex I/O port of an Extron IPL T SF24 or the digital I/O port of an MLC 104 IP Plus, to a relay contact closure. The relay contacts can handle up to 24 VAC or 24 VDC as a tally signal, contact closure signal, or control signal to drive devices in your system, such as a lighting system (figure 1) or remote screens. The relay contacts are protected by an overvoltage circuit.

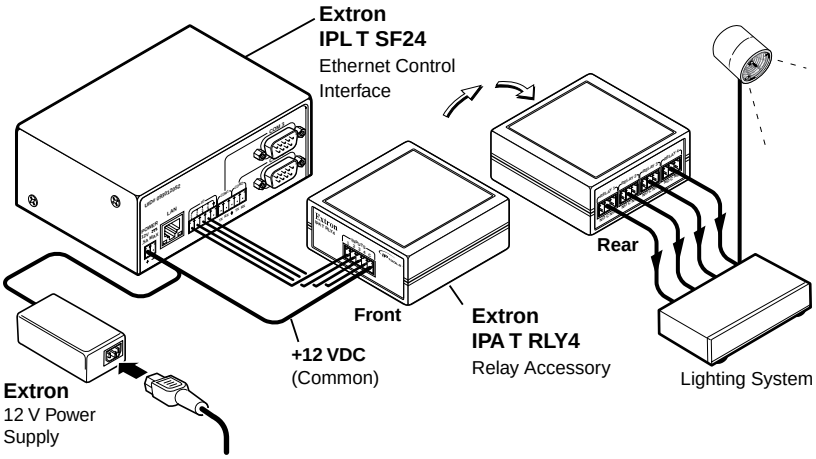


Figure 1. Typical IPA T RLY 4 Application

The compact IPA T RLY4 can be concealed out of the way anywhere in your system with the included hook and loop fastener strip.

Connections

NOTE: The 5-pole captive screw input connector and four 3-pole captive screw output connectors are included with the unit, but you must supply the cable. Extron recommends the CTL Series cable, available non-plenum and plenum bulk rolls and plenum pre-cut lengths.

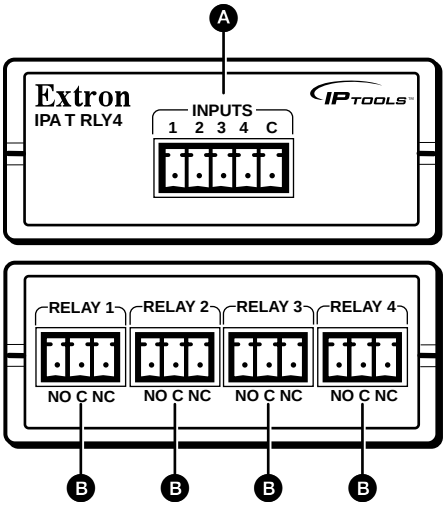


Figure 2. IPA T RLY4 Connections

Input Connections

Ⓐ **Inputs** — Connect the 12 VDC source to the common voltage (C) terminal of the 5-pole captive screw connector. Connect the appropriate input terminal (1 through 4) to the digital output(s) of the IPL T SF24, MLC 104 IP Plus, or other device.

ATTENTION:

- Connect +12 VDC to the C pin only and connect the return to one or all of the Input pins (1 through 4) for the relays that you will use. Reversing the connections can damage the power supply.
- Raccordez une source +12Vcc uniquement à la broche C du connecteur et raccordez le circuit de retour à une ou plusieurs broches d'entrée (1 à 4) pour les relais utilisés. Inverser les raccordements pourrait endommager la source d'alimentation.
- Observe proper polarity when making connections to the Power port on the MLC 104 IP Plus controller. Miswiring can damage the port.
- Veillez à respecter la polarité appropriée lorsque vous effectuez des raccordements au port d'alimentation du contrôleur MLC 104 IP Plus. Une erreur de raccordement pourrait endommager le port.

NOTES:

- Connect the I/O control line to the Input 1 terminal for relay 1, Input 2 for relay 2, and so on.
- Figure 3 is a wiring diagram of a typical application: an Extron MLC 104 IP Plus controlling an IPA T RLY4 relay function (see the *MLC 104 Plus Series User Guide* for information on configuring the MLC to control the IPA T RLY4).
- Figure 4 shows an application that includes an external power supply and an Extron IPCP Pro Dual-NIC Controller. When the relay accessory is connected to an IO port of an IPCP Pro module, ground the external power supply to the IO port ground pin on the control processor.

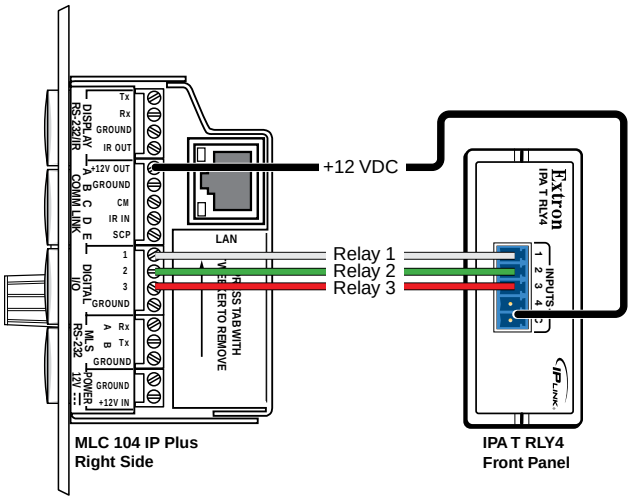


Figure 3. Wiring Diagram for Connection to an MLC 104 IP Plus

IPCP Pro Control Processor with Internal Power Supply
(within another device)

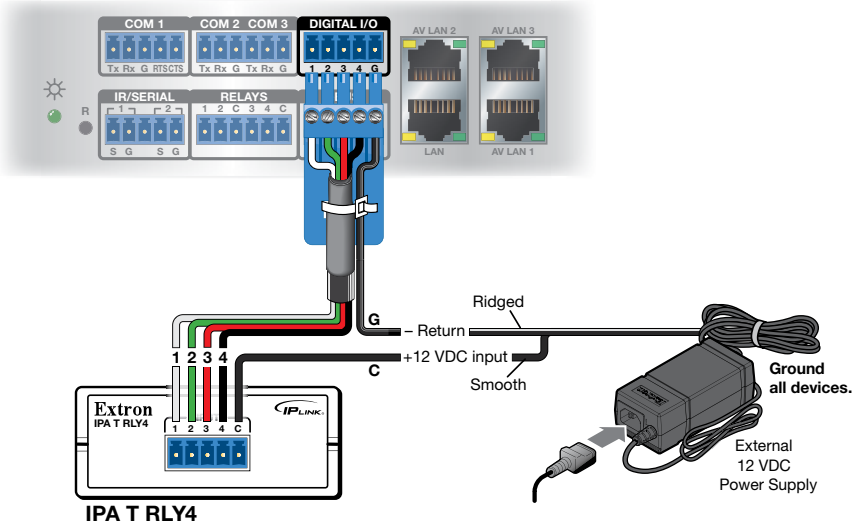


Figure 4. Wiring Diagram for Connection to an IPCP Pro Control Processor with Internal Power Supply

Output Connections

B **Outputs** (see **figure 1** on page 1) — For each relay:

For the normally open contacts, connect a device between the NO and C terminals of the 3-pole captive screw connectors.

For the normally closed contacts, connect a device between the NC and C terminals of the 3-pole captive screw connectors.

NOTE: Figure 5 shows wiring diagrams for a typical application: an Extron IPA T RLY4 driving a screen controllers of various types. These are examples **only**. Your equipment may have different wiring requirements (see the manual from the applicable manufacturer for specific wiring instructions).

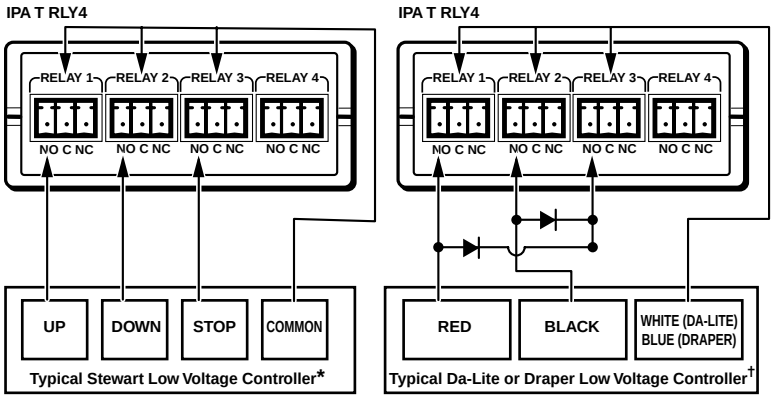


Figure 5. Wiring Diagrams for Connection to a Screen Controller (See the NOTES below)

NOTES:

- * For a typical Stewart screen controller, a momentary closure on relay 1, 2, or 3 causes the screen to move up, down, or stop.
- † For a typical Da-Lite or Draper screen controller, a momentary closure on relay 1 or 2 causes the screen to move up or down. A momentary closure on relay 3 causes the screen to stop in its current position.

  Use 1N4001 or equivalent diodes (not included) for reverse bias protection.

  Recommended diode specifications:

  - 100 mA maximum through diode
  - 50 V maximum reverse bias

Operation

When an input signal is applied to one of the relays, the signal toggles the state of that IPA T RLY4 output relay; the relay NO contacts close, routing the signal for the connected device, and its NC contacts open, interrupting the signal for the connected device. See the chart below for clarification.

I/O mode	I/O state	Relay state	
		NO	NC
Output	On (closed)	Closed	Open
	Off (open	Open	Closed

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