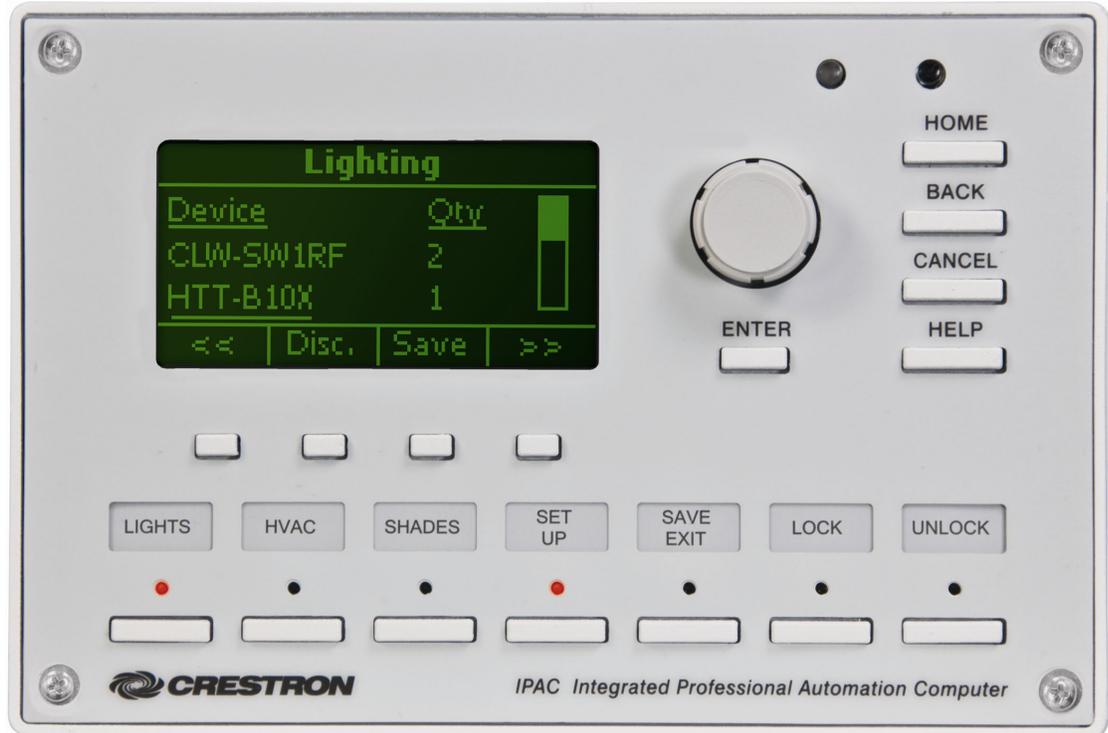


Introduction

This document contains instructions for installing the IPAC series of wall-mounted, Integrated Professional Automation Computers.

The IPAC is designed for installation in a standard 3-gang electrical box.

IPAC-GLI-W-T Physical View (shown in white)



Supplied Parts

The parts supplied with the IPAC are listed in the following table.

Supplied Hardware for the IPAC

DESCRIPTION	PART NUMBER	QUANTITY
Mounting Plate with Ground Wire	4506280	1
Screws, 06-32 x 3/4", Combo Head	2009211	4
Screws, 04-40 x 1/4", Pan, Phil	2007156	2
Screws, 04-40, 7/16", Pan, Phil, Blk (for Black units)	2022900	4
OR		
Screws, 04-40, 7/16", Pan, Phil, Zinc (for White units)	2013409	
Label Sheet	4505784 (Black) OR 4506570 (White)	1
Front Cover	4505711 (Black) OR 4505867 (White)	1

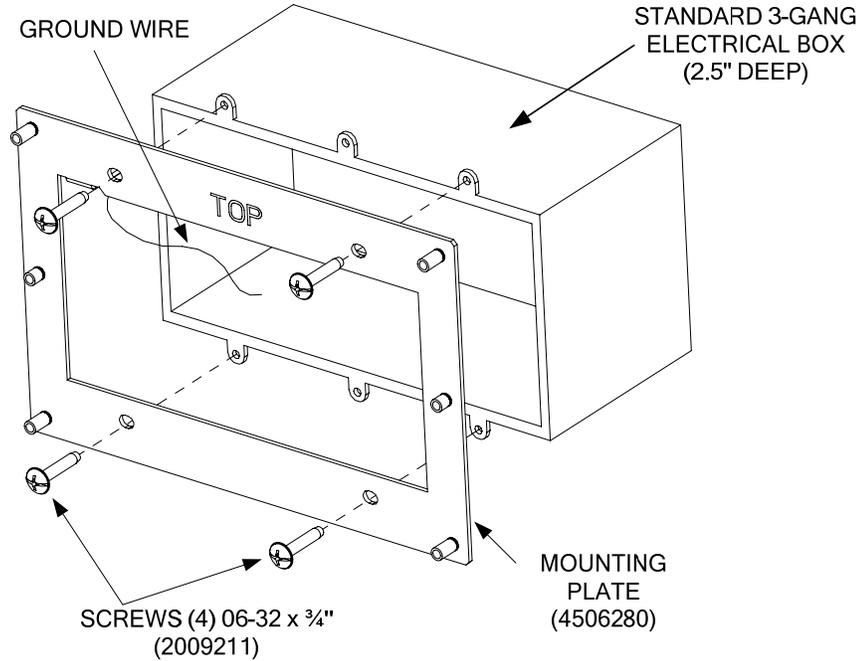
Installation

The following tools are required for installation of an IPAC:

- Philips screwdriver
- Flat screwdriver; 3/32" (2.4 mm) blade size

Install the Mounting Plate

Use the four included 06-32 x 3/4" screws to install the mounting plate on the electrical box. Refer to the diagram below.



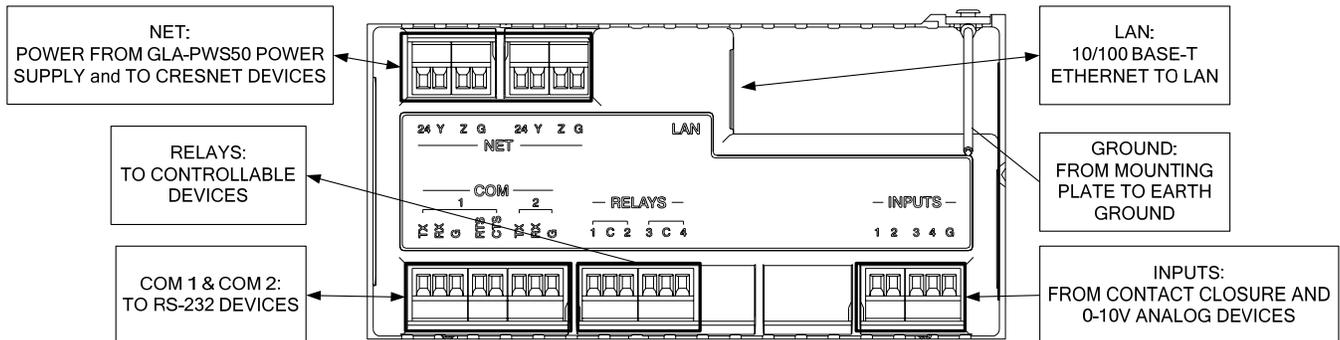
NOTE: The ground wire from the mounting plate must be attached to an earth ground.

Wiring

Make the necessary connections as called out in the illustration below. Details for each connector can be found below and on the following pages.

NOTE: Complete all other connections before wiring the 4-position **NET** connector.

Hardware Connections for the IPAC (Shown with Mounting Plate Attached)



WARNING: Prior to connecting the IPAC, turn off power at the power supply. Failure to do so may result in serious personal injury or damage to the device. Restore power after all connections have been made.

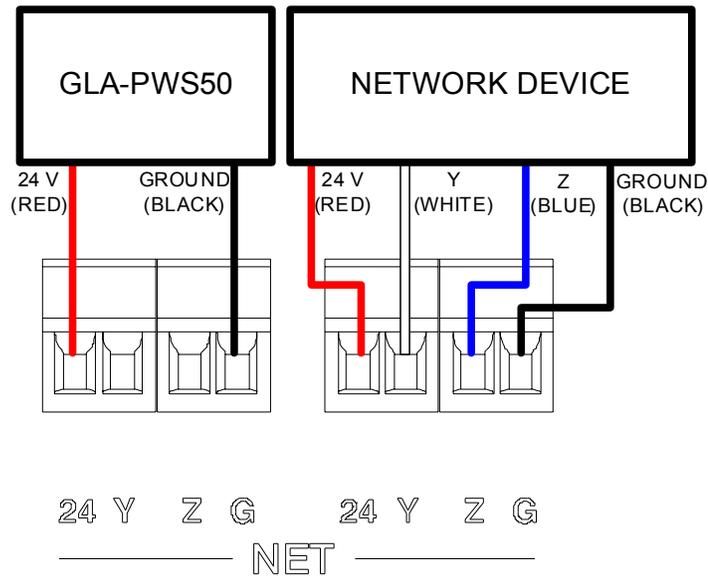
When making connections to the IPAC, note the following:

- All terminals accept one 26-16 AWG wire.
- Use Crestron® power supplies for Crestron equipment.

NOTE: The IPAC can only be powered by either of the 4-position **NET** connectors.

NET Connectors

Refer to the illustration below when wiring the **NET** connectors.



When wiring the **NET** connectors, consider the following:

- Use Crestron Certified Wire such as CRESNET-NP or CRESNET-P. Failure to do so may incur additional charges if support is required to identify performance deficiencies because of using improper wire.
- Use Crestron power supplies for Crestron equipment.
- Provide sufficient power to the system.

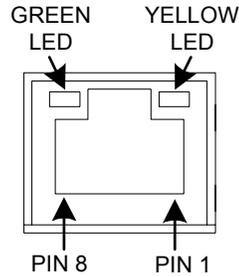
CAUTION: Insufficient power can lead to unpredictable results or damage to the equipment. Please use the Crestron Power Calculator to help calculate how much power is needed for the system (www.crestron.com/calculators).

- For networks with 20 or more devices, use a Cresnet® Hub/Repeater (CNXHUB) to maintain signal quality.

LAN Connector

The following illustration shows the pin assignments of the RJ-45 LAN connector.

WARNING: Incorrect wiring may damage the IPAC.

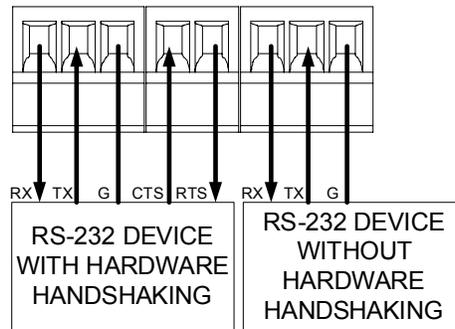
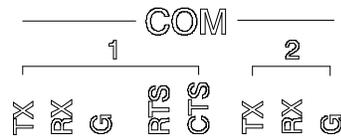


PIN	SIGNAL	PIN	SIGNAL
1	TX +	5	N/C
2	TX -	6	RC -
3	RC+	7	N/C
4	N/C	8	N/C

COM Connector

Refer to the illustration below when wiring the COM connector.

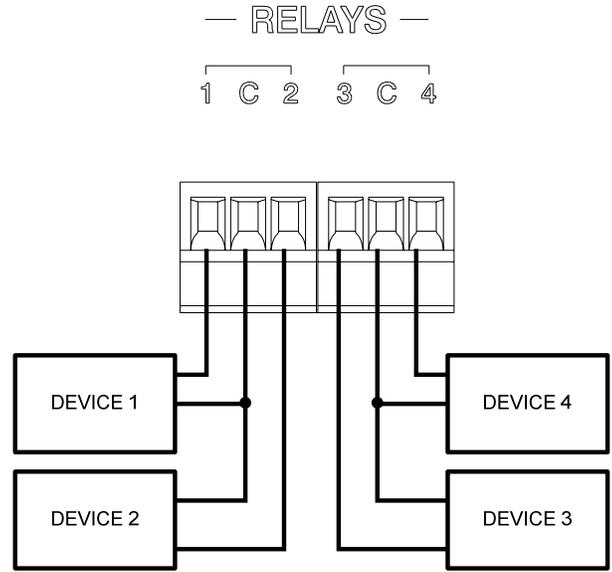
WARNING: Incorrect wiring may damage the IPAC.



RELAYS Connector

Refer to the illustration below when wiring the **RELAYS** connector.

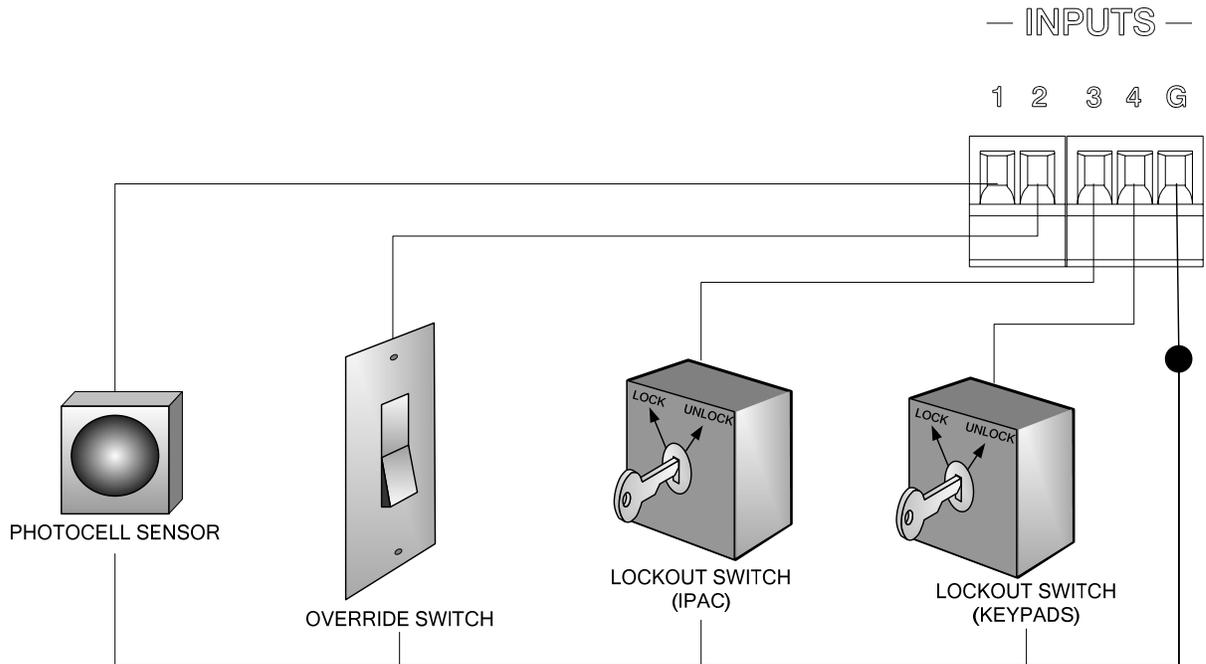
WARNING: Incorrect wiring may damage the IPAC.



INPUTS Connector

The illustration below is an example of what could be connected to the **INPUTS** connector.

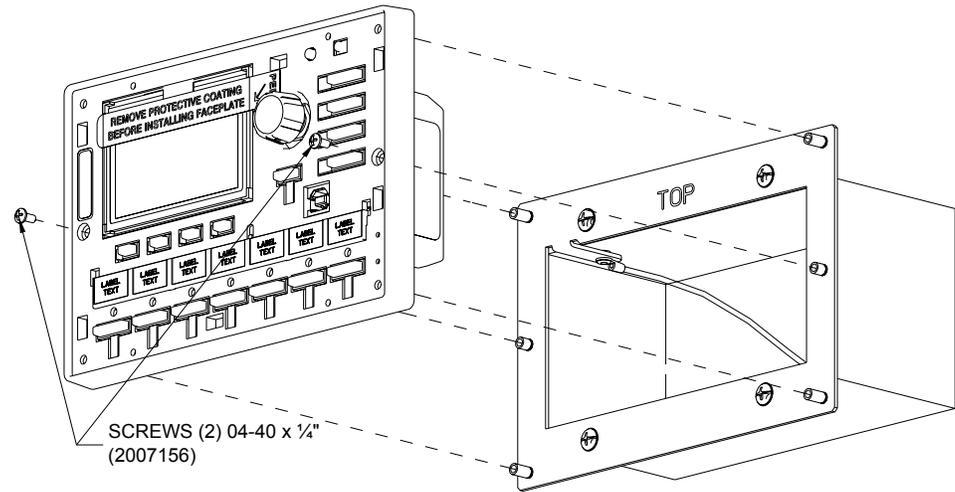
WARNING: Incorrect wiring may damage the IPAC.



Attach the IPAC to the Mounting Plate

Use the two included 04-40 x 1/4" screws to attach the IPAC to the mounting plate as shown in the following diagram.

CAUTION: Excess wire that is pinched between the IPAC and the electrical box could short out. Make sure that all excess wire is completely inside the electrical box and not pinched between the box and the IPAC or the mounting plate.

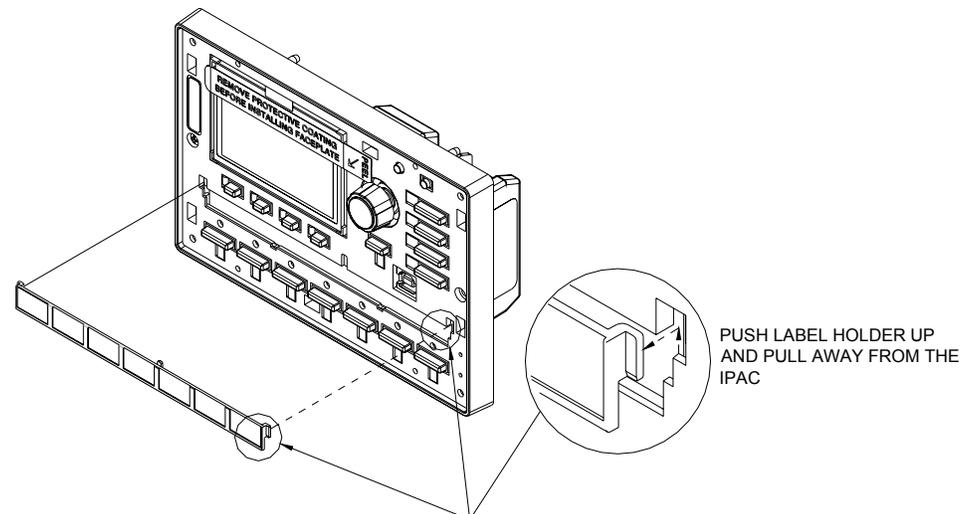


Apply Custom Labels

Pre-printed labels for the seven buttons on the IPAC can be applied to the label strip.

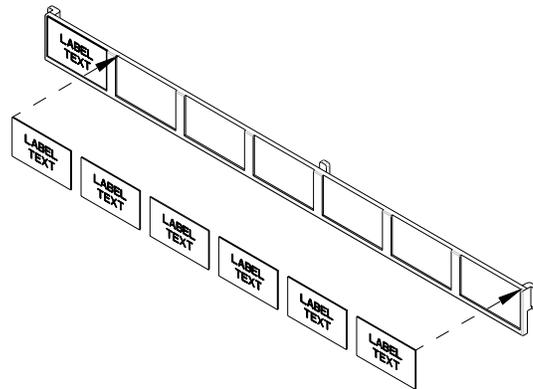
Remove the Label Holder

As shown in the following diagram, slide the label holder up and remove it from the IPAC.



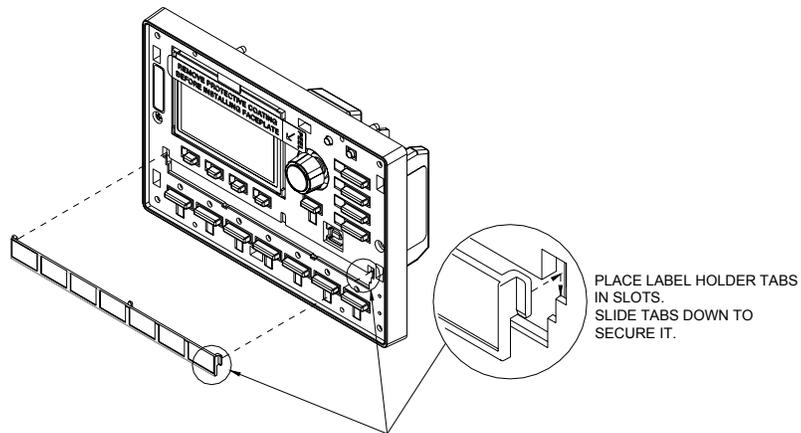
Affix Labels to the Label Holder

As shown in the following diagram, attach labels to the label holder. The included labels are shown in the appendix on page 11.



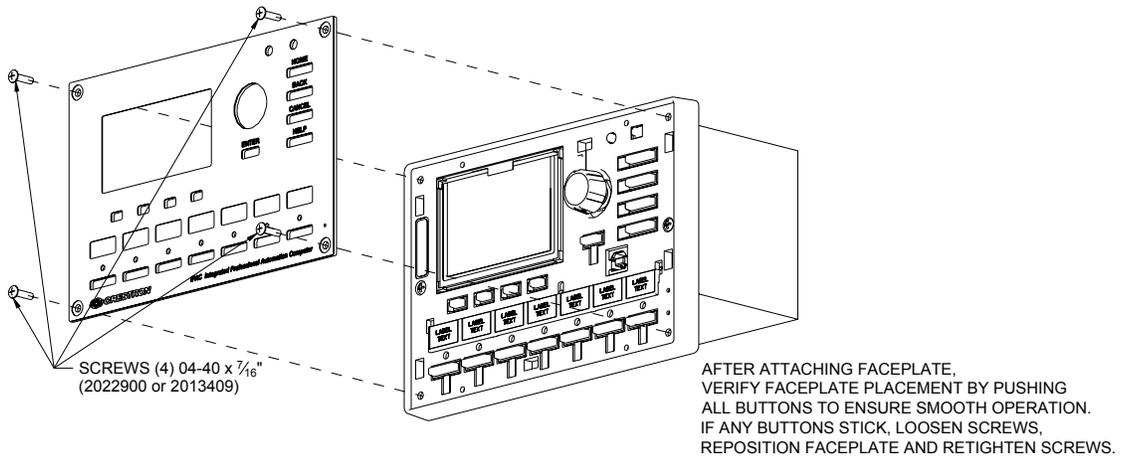
Install the Label Holder

As shown in the following diagram, attach the label holder by placing the holder tabs in the slots and sliding them downward into position.



Attach the Faceplate to the IPAC

Use the included 04-40, 7/16” screws to attach the faceplate to the IPAC as shown in the following diagram.



Specifications

IPAC Specifications

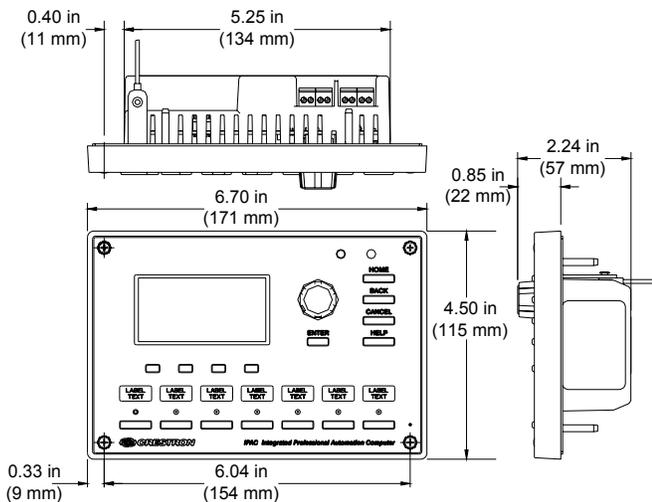
SPECIFICATION	DETAILS
Processor CPU	32-bit Freescale ColdFire® Microprocessor
Memory SDRAM	32 MB
NVRAM	1 MB
Flash	8 MB
Power Failure Memory	10 years
Time Clock Accuracy	±1 minute per year
Operating System	Real-time, preemptive multi-threaded/multitasking kernel; FAT32 file system with long names; includes default program for Green Light Power Switching systems
Ethernet	10/100BASE-T, auto-negotiating, full/half duplex, static IP or DHCP, DNS, SSL, TCP/IP, UDP/IP, CIP, SMTP, SNMP, built-in Web server and e-mail client; supports Crestron e-Control®2 XPanel and RoomView® applications.
IR Receiver Reception Frequency	36 to 38 kHz IR
Formats	Crestron format, RC5
Range	Up to 50 feet (15 meters) line of sight typical, dependent on angle, obstructions, IR interference and IR remote signal strength
Power Requirements	10 Watts (0.42 A @ 24 VDC); GLA-PWS50 or equivalent power supply required (sold separately)

IPAC Specifications (Continued)

SPECIFICATION	DETAILS
Environmental Temperature	32° to 104 ° F (0 ° to 40 ° C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	20 BTU/Hr
Enclosure Faceplate	High-impact plastic, black or white, with polycarbonate label overlay
Chassis	Injection-molded plastic with steel mounting plate
Mounting	Requires 3-gang plaster ring or electrical box (not included), ≥ 2.5 in (6.4 cm) deep recommended
Dimensions Height	4.50 in (115 mm)
Width	6.70 in (171 mm)
Depth	2.24 in (57 mm)
Weight	1.32 lbs (0.60 kg)
Available Models IPAC-GL1-B-T	IPAC Integrated Professional Automation Computer for Power Switching (Black)
IPAC-GL1-W-T	IPAC Integrated Professional Automation Computer for Power Switching (White)
Available Accessories GLA-PWS50	Wall Mount 50 Watt Cresnet Power Supply
MP/MPC/IPAC_FRO NT_LABEL-[B,W]-T	Set of Engravable Backlit Labels

(Continued on following column)

IPAC Overall Dimensions



Industry Compliance

This unit has been manufactured to comply with UL's Standards for Safety in Canada and the United States. Formal approval is pending.

As of the date of manufacture, the IPAC has been tested and found to comply with specifications for CE marking.



NOTE: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
-

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

IPAC Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Display is dark.	Power is not present.	Verify that power is properly connected to the IPAC.

For issues encountered during operation, refer to the latest version of the IPAC-GL1 Setup Guide (Doc. 6660) which can be downloaded from the Crestron website (www.crestron.com/manuals).

Reference Documents

The latest version of all documents mentioned within the guide can be obtained from the Crestron website (www.crestron.com/manuals). This link will provide a list of product manuals arranged in alphabetical order by model number.

List of Related Reference Documents

DOCUMENT TITLE
IPAC Setup Guide

Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling the Crestron corporate headquarters at 1-888-CRESTRON [1-888-273-7876].

You can also log onto the online help section of the Crestron website (www.crestron.com/onlinehelp) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Appendix

The following labels are included with the IPAC:

PRESET 1	EVENT 1	ROOM 1	FLOOR 1	LEVEL 1	EXTERIOR 1	OFFICE 1	GROUP 1	HALLWAY 1	NORTH
PRESET 2	EVENT 2	ROOM 2	FLOOR 2	LEVEL 2	EXTERIOR 2	OFFICE 2	GROUP 2	HALLWAY 2	SOUTH
PRESET 3	EVENT 3	ROOM 3	FLOOR 3	LEVEL 3	EXTERIOR 3	OFFICE 3	GROUP 3	HALLWAY 3	EAST
PRESET 4	EVENT 4	ROOM 4	FLOOR 4	LEVEL 4	EXTERIOR 4	OFFICE 4	GROUP 4	MAIN ENTRY	WEST
PRESET 5	EVENT 5	ROOM 5	FLOOR 5	LEVEL 5	EXTERIOR 5	OFFICE 5	GROUP 5	SIDE ENTRY	SHIPPING
PRESET 6	EVENT 6	ROOM 6	FLOOR 6	LEVEL 6	EXTERIOR 6	OFFICE 6	GROUP 6	REAR ENTRY	ATRIUM
PRESET 7	EVENT 7	ROOM 7	FLOOR 7	LEVEL 7	EXTERIOR 7	OFFICE 7	GROUP 7	WAREHOUSE	LANDSCAPE
LOCK	LOCK KEYPADS	TIMECLK OFF	ALL ON	COMBINE	RUN	ENTER	TOLL BOOTH	HALLWAY	LOADING BAY 1
UNLOCK	UNLOCK KEYPADS	TIMECLK ON	ALL OFF	UN-COMBINE	HOLD	EXIT	GATE	EXTERIOR	LOADING BAY 2
ENERGY SAVE	NIGHT	DAY	OVERRIDE	EMERGENCY	CLEAN	RESTORE	PANIC	ALARM	LOADING BAY 3

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact an authorized CRESTRON dealer. Only authorized CRESTRON dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

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