

## HCPU48CC and HIOC12CC Controller Card and Input/Output Card Installation



The HCPU48CC Controller Card is the programmable intelligence card for a Complete Control Lighting Control Panel.

The HCPU48CC Card, in conjunction with one or more HIOC12CC Input/Output Cards, provides the distributed intelligence for each panel. The HCPU48CC provides the intelligent operating scenarios, logic functions and communications for a Lighting Control Panel with up to 48 relays.

The HIOC12CC Card turns the relays ON/OFF and monitors their status. Each HIOC12CC is associated with a bank of 12 relay outputs and 3 programmable system switch inputs.

### Capacities:

12-relay interior (HIN__12CC)	1 HCPU48CC	1 HIOC12CC
24-relay interior (HIN__24CC)	1 HCPU48CC	1-2 HIOC12CCs
48-relay interior (HIN__48CC)	1 HCPU48CC	1-4 HIOC12CCs

### Features

**Complete Control intelligence cards feature:**

- Plug-in modular configuration.
- Direct relay switching. Each relay in the panel may be controlled directly with a switch or occupancy sensor.
- Runtime and status information for all relays.
- Memory backup during power outages.

### HCPU48CC Controller Card:

- Built-in programmable lighting scenarios for panels up to 48 relays.
- RS232 and Dataline communications ports, with change-of-state annunciation.
- Two programmable switch inputs per panel.

### HIOC12CC Input/Output Card:

- 12 relay control outputs. Up to 3 relays may be wired in parallel per output.
- Relay status monitoring. Monitors the pilot contacts on each relay to provide true status indication.
- Three programmable system (global) switch inputs per card support global control of relays in a networked system.

**Before starting, read the instructions on the next three pages. If you have any questions, call our Service Team at: 888-852-2778.**



# HCPU48CC and HIOC12CC Controller Card and Input/Output Card — Installation

**CAUTION:** Make sure all power to the panel is OFF when inserting or removing cards. It is recommended that you turn off all power at the circuit breaker panel until all wiring is complete and the unit is fully assembled. Conform to all applicable codes.

## Insert Card

**CAUTION:** If using a dataline, make sure the Dataline Power Supply (HDPS1CC) is in the “STANDBY” mode before plugging in cards.

Remove the metal card cover from the center of the interior.

Insert the HCPU48CC Controller Card and associated HIOC12CC Input/Output Cards in the slots. The slot for the Controller Card is clearly marked “CONTROLLER”. Insert Input/Output Cards in order, starting with the slot marked “RELAYS 1-12/PSS 1,2,3”. Push each card in until it “snaps” into place.

## Set Panel Address

Turn the three rotary dials on the front of the Controller Card to set the address for each lighting control panel. Panel addresses are user-selectable, but must be unique for each panel within a networked system. (A typical numbering scheme might be: 101, 102 ... 201, etc.)

## Power Up and Test

Secure the panel cover. Restore power to the circuit breaker panel.

Check the HCPU48CC Hardware Status LED (to the right of the Panel Address setting knobs): Off = No power, On steady = OK, Flashing = Defective board.

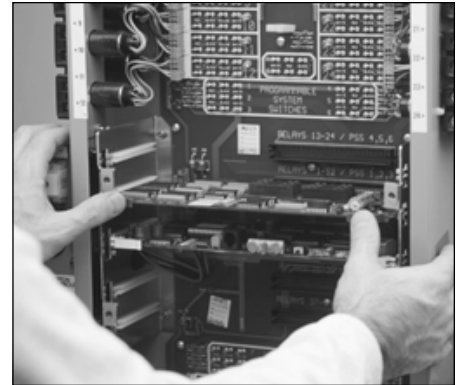
Check the HCPU48CC Memory Status LED (to the left of the Panel Address setting knobs): Flashing = Not programmed (OK); Off = Programmed (OK).

Check the LEDs on the HIOC12CC card(s): On steady = OK, Off = No power.

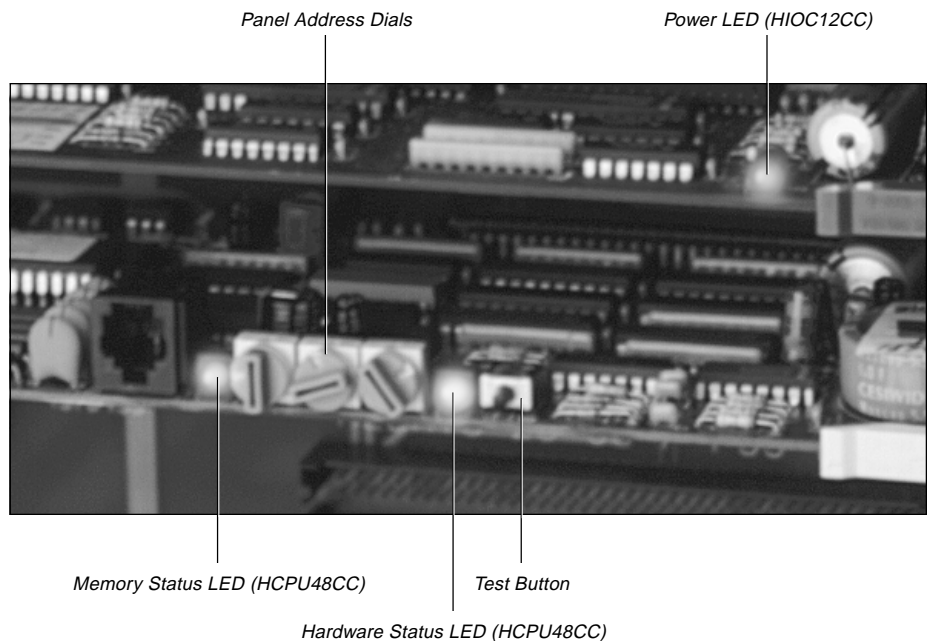
Press the Test Button on the HCPU48CC and hold for 4 seconds. Relays will sequence ON (OFF). Repeat for OFF (ON).



Remove the card cover.



Insert the HCPU48CC Controller Card and associated HIOC12CC Input/Output Cards.



### Wire Panel Master ON/OFF Switch Inputs A and B

Each switch input will accept any of the switch types shown in **Figure 1**. The A & B inputs default to Panel Master ON/OFF operation. They can be programmed to control any group within the panel.

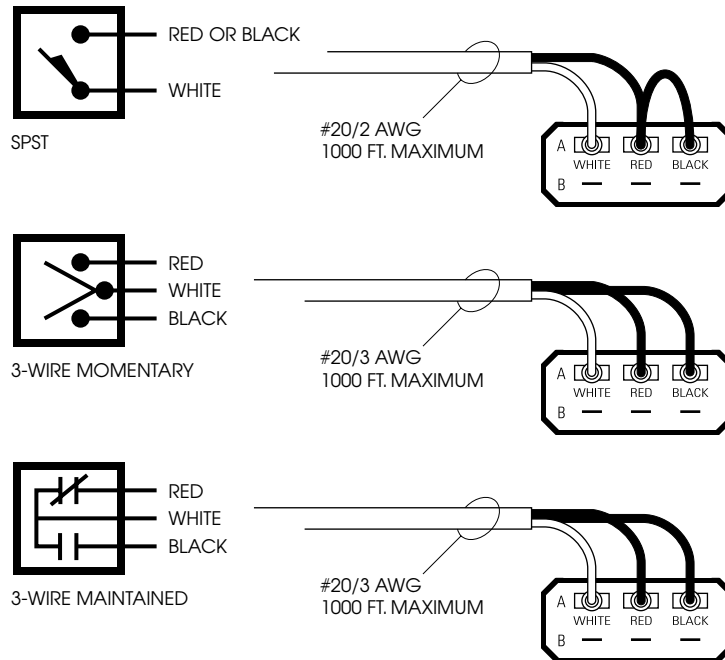
### Wire Programmable System Switch Inputs

Each Programmable System Switch input will accept any of the switch types shown in **Figure 2**. These inputs may be programmed to control any group of relays within the panel. In a networked system, they may also control relays within other panels connected to the dataline.

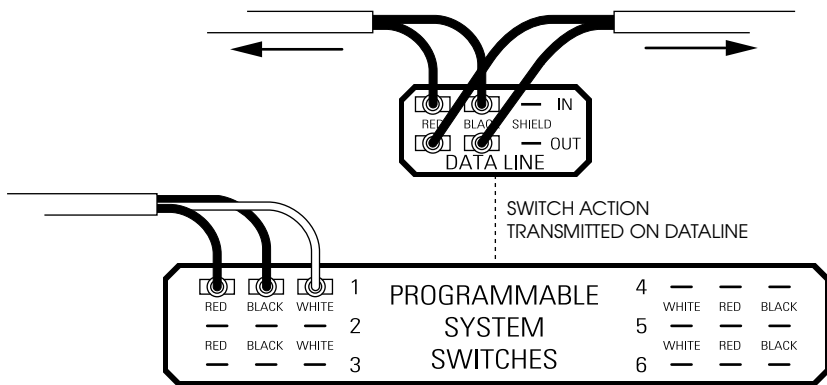
### Program and Test Operation

See the Software Manual for programming instructions.

**Figure 1 - Master Switch Type (isolated contacts only)**



**Figure 2 - Wire Programmable System Switch Inputs**



NOTE: INPUTS 4, 5 AND 6 REQUIRE A SECOND HIOC12CC

**CAUTION:** Do not remove or install the Controller Card or its associated Input/Output Cards when either power supply light is on. After powering up for testing, be sure to avoid line-voltage wiring.

**EMERGENCY SERVICE OR SUPPORT:**  
888-852-2778

### Troubleshooting

**No relays respond to the test switch (but they do respond to direct switches) ...**

Check the HCPU48CC Hardware Status LED with the low-voltage power supply on. If the LED is off, turn off the low-voltage power supply and reseal the card.

If the LED is flashing, the card is defective. Call the Emergency Number above.

**Individual relay or group of relays does not respond to the test switch (but it does respond to direct switches) ...**

Turn off the low-voltage power supply and reseal the Input/Output Card(s) associated with those relays. Restore the power and test.

If still not working, turn off the low-voltage power and replace the Input/Output Card(s). Call the Emergency Number above for replacements.

