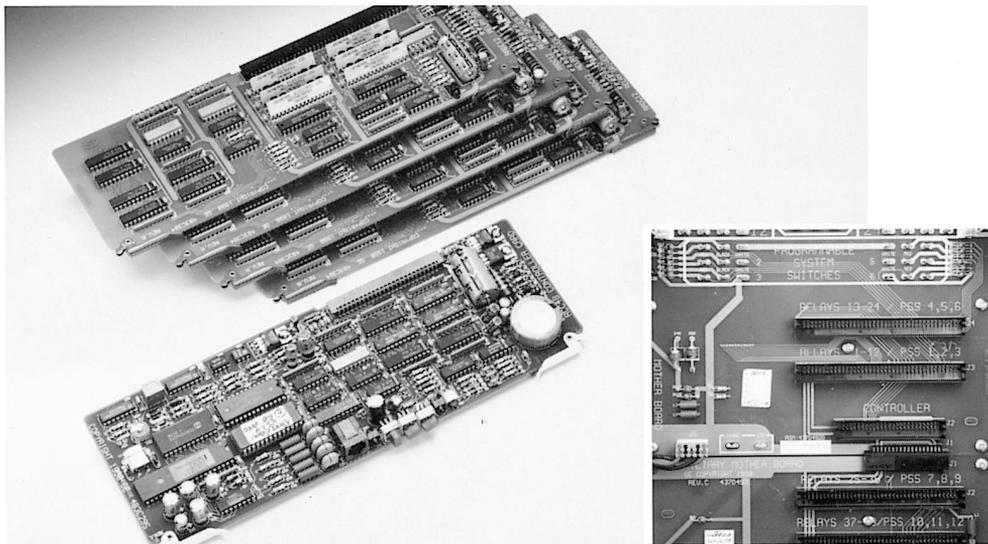# GE Total Lighting Control

Lighting Automation Panel
Relay Driver Card
Catalog Number RRDC12

The RRDC12 is the relay driver card for a Lighting Automation Panel (LAP). The 24-relay LAP accepts one Controller Card (RCC48) and one or two Relay Driver Cards; the 48-relay LAP accepts one RCC48 and up to four RRDC12s. These provide the stand-alone intelligence functions for the panel.

The RCC48 provides the intelligent operating scenarios, logic functions and communications. The RRDC12(s) actuate the relays ON/OFF and monitor their status. Each RRDC12 is associated with a bank of 12 relay outputs and 3 programmable system switch inputs.

Features

1. Plug-in modular configuration.
2. 12-relay control capability.
3. Direct relay switching. Each relay in the panel may be controlled directly with a switch or occupancy sensor.
4. Relay status monitoring. The RRDC12 monitors the pilot contacts on each relay to provide true status indication.
5. Three relays may be wired in parallel to be controlled by a single RRDC12 output.
6. Three programmable system switch inputs. These inputs support global control of relays in a networked system.

NOTE: The RRDC12 is installed with an RCC48. These installation instructions show both devices.

Before starting, read the following installation instructions. If you have questions, call GE Total Lighting Control Service at: 1-877-584-2685 (LTG-CNTL) in the USA and Canada.

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise that are not covered for the purchaser's purposes, the matter should be referred to the GE Company.

Installation

CAUTION: The low voltage power supply must be off when inserting or removing the cards. The hinged, lockable cover shown in these instructions allows access to the low voltage (Class 2) wiring compartment without exposing the line voltage area. If using a standard cover, the line voltage sections must be covered to avoid exposure to the live wiring.

**Insert Card
CAUTION: If using a dataline, make sure the RDPWR (Dataline Power Supply) is in the Standby mode before plugging in the cards.**

Remove the card cover.

Insert the RCC48 Controller Card and associated RRDC12 Relay Driver Cards.
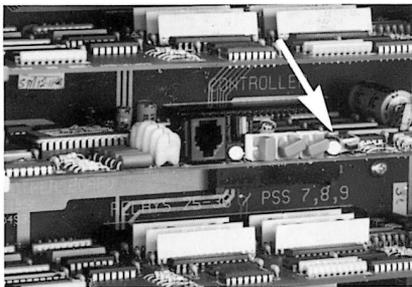
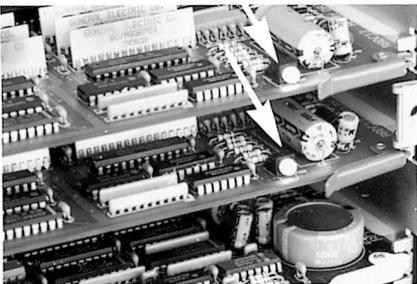

Power up and Test

Secure the panel cover. Turn on the low voltage power supply circuit.

Check the RCC48 Hardware Status LED (to the right of the Panel Address setting knobs): Off = No power; On steady = Okay; Flashing = Defective board.

Check the LED(s) on the RRDC12 card(s): On steady = Okay; Off = No power.
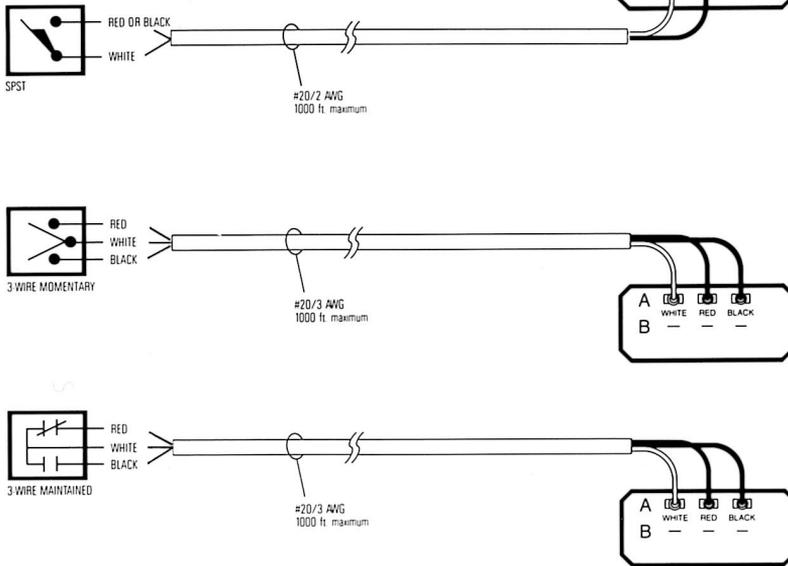

Press the Test Button on the RRC48 and hold for 4 seconds. Relays will sequence ON (OFF). Repeat for OFF (ON).
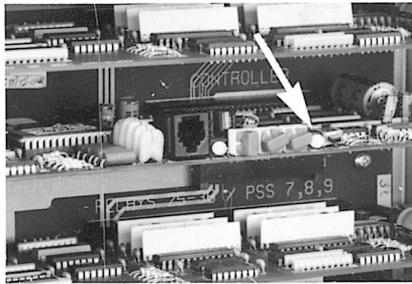
Wire Panel Master ON/OFF Switch Inputs A and B

NOTE: Each switch input will accept any of the switch types shown below. The A&B inputs default to Panel Master ON/OFF operation. They can be programmed to control any group within the panel.
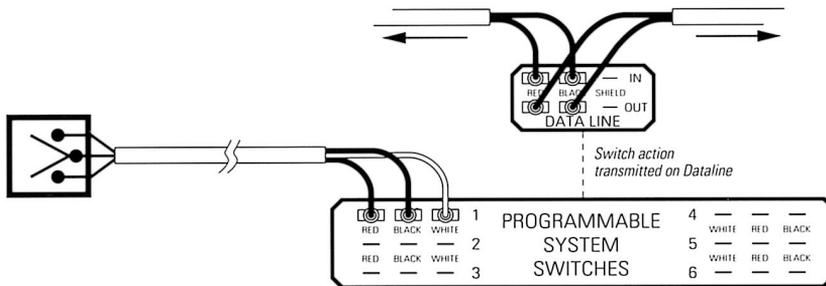
Master Switch Type (isolated contacts only)

RED OR BLACK
WHITE
SPST

#20/2 AWG
1000 ft. maximum

A — — —
WHITE RED BLACK
B

RED
WHITE
BLACK
3-WIRE MOMENTARY

#20/3 AWG
1000 ft. maximum

A
WHITE RED BLACK
B

RED
WHITE
BLACK
3-WIRE MAINTAINED

#20/3 AWG
1000 ft. maximum

A
WHITE RED BLACK
B

Wire Programmable System Switch Inputs

Program and Test Operation
(See Software Manual)

NOTE: Each Programmable System Switch input will accept any of the switch types shown above. 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.

— IN
RED BLACK SHIELD
— OUT
DATA LINE

Switch action
transmitted on Dataline

RED BLACK WHITE   1
— — —   2
RED BLACK WHITE
— — —   3

PROGRAMMABLE
SYSTEM
SWITCHES

4 — — —
WHITE RED BLACK
5 — — —
WHITE RED BLACK
6 — — —

Note: Inputs 4, 5, 6 require a second RRDC12

Troubleshooting

CAUTION: Do not remove or install the RCC48 or its associated Relay Driver Cards when either power supply light is on. These instructions assume the panel has a hinged cover which allows access to the low voltage compartment only. If you are using a standard cover, the line voltage sections must be covered to avoid exposure to the live wiring.
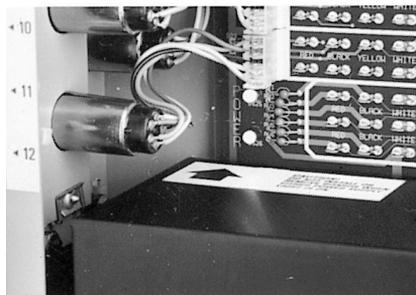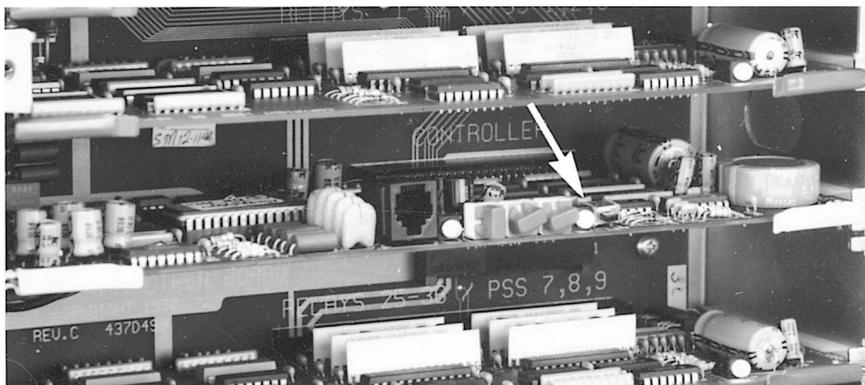
**EMERGENCY SERVICE OR SUPPORT
1-877-584-2685 (LTG-CNTL)**

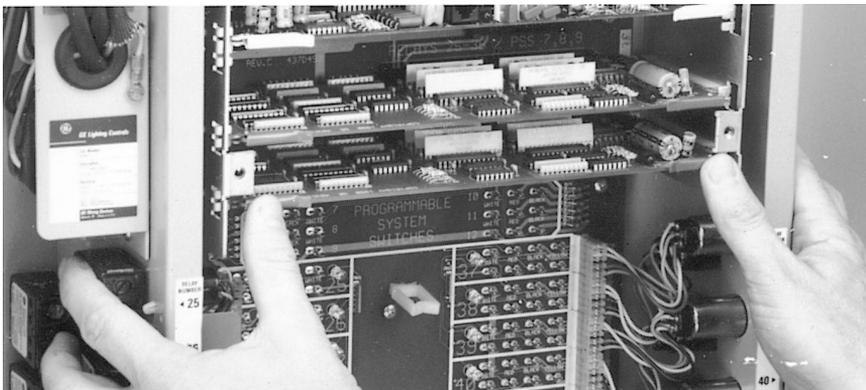|		
No Relays Respond to the Test Switch (but do respond to direct switches)	Check the RCC48 Hardware Status LED with the low voltage power supply on. If the LED is off, turn off the low voltage power supply and reseat the card.	If the LED is flashing, the card is defective. Call the Emergency Number above.

Individual Relay or Group of Relays Does Not Respond to the Test Switch (but does respond to direct switches)	Turn off the low voltage power supply and reseat the Relay Driver Card(s) associated with those relays. Restore power and test.	If still not working, turn off low voltage power and replace Relay Driver Card(s). Call the Emergency Number above for replacements.

GE Industrial Systems