

DECORA[®]
ELECTRONIC CONTROLS
RESIDENTIAL POWERLINE
CARRIER COMPONENT
SWITCH MODULE

Instruction Sheet

See Wiring Diagram

Cat. No. 6371



Rating:
20 Amps 240 Volts 60 Hz AC Only
Minimum voltage: 216 volts
Maximum voltage: 264 volts
Maximum number of modules in one circuit: 10

Engineering Data:
input Signal: 121 kHz carrier signal super-
imposed on 120V AC power line
Minimum signal strength: 100mV
Ambient operating temperature: minimum
0°F (- 18°C) to maximum 104°F (40°C)
Ambient humidity: 0 to 90% RH, non-
condensing

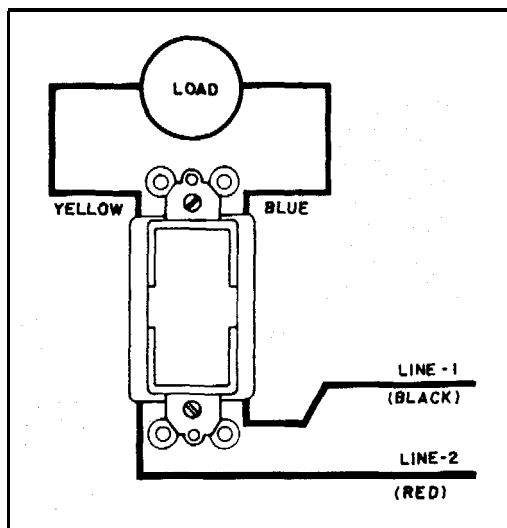
Description: This Wall Switch Module is designed for use with Leviton Decora Electronic Control Powerline Carrier Components. It functions as a remote electrical load switching device which responds to coded commands from one or more DEC controllers, remotely located from the module. The switch module can also be operated manually as a standard type wall switch. The module may be set to any of 256 address codes, selected at the time of installation. The desired address is set by removing the touchplate, and selecting letter and number codes with a small-blade screwdriver. The module is equipped with twelve-inch leads for installation in a standard wall box. It will respond to ALL LIGHTS ON/ALL OFF commands, but will not respond to DIM/BRIGHTEN commands. It is suitable for incandescent and fluorescent lighting and can be applied to resistive and inductive loads. It is available in brown, ivory and white with a matching decorator wall-plate.

SAVE THIS INSTRUCTION SHEET.
IT CONTAINS IMPORTANT TECHNICAL
DATA, ALONG WITH TESTING AND
TROUBLESHOOTING INFORMATION,
WHICH WILL BE USEFUL AFTER
INSTALLATION IS COMPLETE.

IMPORTANT NOTICE

The Leviton powerline carrier signal is designed to provide the greatest signal integrity and noise immunity possible. However, electrical "noise" can cause interference with the signal. Leviton has developed techniques and hardware for overcoming this interference when properly applied. It is the responsibility of the specifier/installer to test for signal strength and the presence of "noise" using Leviton test equipment (Cat. No. 6385 Signal Test Transmitter and Cat. No. 6386 Signal Strength Indicator), and to properly apply signal coupling and noise-filtering equipment according to the guidelines provided in the DEC Technical Manual.

Leviton specifically denies any warranty of performance, stated or implied, where electrical "noise" interference exists at the time of installation, or subsequent to installation by the addition of noise-producing devices or equipment, or where these components have been installed for non-residential applications.



WIRING DIAGRAM

Installation Instructions- See Wiring Diagram

1. Disconnect power from both legs of the 240 volt line at fuse or circuit breaker,
2. Prepare branch circuit conductors for connection by stripping insulation to expose 3/4 inch of bare copper at end.
3. Remove precut insulation sleeves on each switch lead wire to expose bare copper strands at end.
4. In accordance with WIRING DIAGRAM and steps below, connect each circuit conductor to proper switch module lead by twisting bare copper ends tightly together and screwing a wire connector over connection until bare wire is completely covered. Secure each connection with electrical tape.

5. Connect load (L1) conductor to blue LOAD L1 lead on switch module.
6. Connect load (L2) conductor to yellow LOAD L2 lead on switch module.
7. Connect line (L1) conductor to black LINE L1 lead on switch module.
8. Connect line (L2) conductor to red LINE L2 lead on switch module.
9. Mount switch module in wall box using two screws provided.
10. Set the desired letter and number codes. The module dial settings are used to provide each module or module group with a unique address in the DEC network. The RED letter code dial has 16 possible settings (A-P). The BLACK number code dial has 16 possible settings (1-6), also. Therefore, 256 addresses are available within the network.

6

7

8

If the wall switch module has its RED letter code dial set to "C" and its BLACK number code dial set to "7," the address for that module becomes "C7." This module will now only respond to commands sent to the "C7" address. Between one and fifty modules may be set to the same address to switch simultaneously, if desired.

11. Restore power by turning circuit breaker ON or replacing fuse.

NOTE: Turn power OFF at fuse or circuit breaker when serving modules and/or their designated loads.

Testing (following installation)

1. With the Cat. No. 6371 properly wired and powered, tap the switch plate several times to ensure that the mod-

ule is turning its load on and off in response to manual control. Leave the switch in the ON position. Next, use a Cat. No. 6320 Table Top Controller, or any other controller, to check for proper module operation as follows:

2. Transmit an OFF command to this module. It should respond by turning its assigned load off.
3. Transmit an ALL LIGHTS ON command to this module from an appropriately coded controller. It should respond by turning its assigned load on.
4. Transmit an ALL OFF command from an appropriately coded controller. It should respond by turning its assigned load off.

9

PERFECT PERFORMANCE CHECKLIST

If the 6371 appears to be functioning improperly, proceed with the following steps:

1. Confirm that the 6371 module is wired EXACTLY as shown in the wiring diagram.
2. Confirm that the module is being supplied from a 240V 60Hz AC source only.
3. Confirm that the load being controlled is in proper working order (check for burned-out bulbs, frozen motors, etc.).
4. Confirm that the load being controlled does not exceed the 20 amp module limit, including start-up.
5. Confirm that the module's letter code and number code are set correctly.

10

11

6. Confirm that the switch module's touch plate is mounted right-side up. After the touch plate has been removed to set the address code, it is possible to replace it upside down. If this happens, the switch still responds to controller commands, but will not operate manually.
7. Check to see whether the Cat. No. 6371 module chatters instead of switches when it receives a command signal. Modules may chatter because line voltage is too low or due to poor wiring connections. If module continues to chatter after both voltage level and wiring are found to be satisfactory, it is faulty and must be replaced.

12

IMPORTANT: If module still does not operate properly after items 1-7 have been checked, the fault does not lie with the module. Proceed with steps 8, 9 and 10.

8. Confirm that the controller is powered and is set to transmit commands to the same letter and number code on the module.
9. Set the controller to transmit address P1 . Using a Signal Strength Indicator, Cat. No. 6386, plugged in at the location of the controller, confirm that the controller is transmitting a minimum reading of two volts of command signal on the Hi-Range setting. If signal strength is less, have controller checked.
10. Check for adequate command signal at the Cat. No. 6371 location as follows:

DI-8004371

13

- a) Plug the Cat. No. 6365 Signal Test Transmitter into a receptacle on the same circuit as the controller.
- b) Using the Cat. No. 6366 Signal Strength Indicator at the Cat. No. 6371 location, check the command signal amplitude. Signal strength must be 100 mV minimum. If there is less than 100 mV of signal present, it may be necessary to couple both legs of the 120/240 volt power service at the entrance panel using Cat. No. 6299 Signal Bridge.
- c) If the yellow ERROR CONDITION indicator is lit, there is electrical "noise" present on the AC line which is interfering with proper module operation. The source of this noise must be identified and either filtered out or eliminated. (See Technical Manual).

14