



**3-Way Wall Switches
for Local Dimming
Cat. No. 6383
Rated: 500W-120VAC
Incandescent Only
Installation Instructions**

TO BE INSTALLED AND/OR USED IN ACCORDANCE
WITH APPROPRIATE ELECTRICAL CODES AND
REGULATIONS



INTRODUCTION:

Leviton Residential Powerline Carrier Components are designed to provide the greatest signal integrity and noise immunity possible. However, in some environments intense electrical noise can cause interference with the signal. Leviton has developed hardware and techniques 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. Nos. 6385 (Signal Test Transmitter) and 6386 (Signal Strength indicator), and to properly apply signal coupling and noise reduction equipment according to the guidelines provided in the Decora Home Controls (DHC) Technical Manual and the DHC Troubleshooting Guide.

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.

DHC Components are for residential use only. Installation for any other application voids any warranty, stated or implied.

DESCRIPTION:

The Leviton 3-Way Wall Switch, Cat. No. 6383, is designed for use with DHC Residential Powerline Carrier Components. Cat. No. 6383 functions as a remote switching and dimming device which responds to coded DIM/BRIGHT, ON/OFF, and ALL LIGHTS ON/OFF commands from one or more controllers remotely located from the device.

Cat. No. 6383 can be operated manually as a standard type wall or dimmer switch. Cat. No. 6383 may be set to any of 256 address codes, to be selected at the time of installation. The desired address is set by removing the switch plate and selecting letter and number codes with a small blade screwdriver. Both units are equipped with six-inch pre-stripped leads and install in a standard wall box. It is suitable for incandescent lighting loads only.

SPECIFICATIONS:

Rating: 500W-120VAC, Incandescent

Minimum Voltage: 112V

Maximum Voltage: 138V

Maximum number of modules per circuit: 10

Input Signal: 121 kHz carrier signal superimposed on a 120VAC power line

Minimum Signal Strength: 100mV

Ambient Operating Temperature: Min. 0°F (-18°C) to
Max. 104°F (40°C)

Ambient Humidity: 0 to 90% RH, non-condensing

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SAFETY PRECAUTIONS:

WARNING: To avoid overheating and possible damage to this device and other equipment DO NOT install to control a receptacle, fluorescent lighting, a motor- or a transformer-operated appliance.

WARNING: To insure proper operation, there must be power in the circuit. In order to locate it safely you must use an approved test lamp with a ground wire for that one side of the lamp. If there are no existing grounds in the wall boxes, find and use a structured ground, such as a cold-water pipe. If a power interruption should occur while the device is ON, the light load will remain OFF when power is restored.

NOTE: Save this instruction sheet. It contains important technical data, along with testing and trouble shooting information, which will be useful after installation is complete.

APPLICATIONS:

Cat. No. 6383 is intended to control incandescent fixtures up to 500W total load only.

Local Operation

1. Tap the switch plate, light fades to preset level.

NOTE: Light is preset to last programmed dimming level.

2. Press and hold the switch plate, light will cycle to full bright or full dim and stop. Release switch plate and press and hold switch, light will toggle direction.

3. Tap the switch plate and light fades OFF.

4. Pressing the switch plate while fading will cause the dimmer to stop at the current level.

NOTE: Below the switch plate is a small slide switch. When servicing a controlled fixture move this slide switch to the LEFT (OFF position). This will cut the power to the fixture. After servicing is complete move the slide switch back to the RIGHT (ON position) to restore power for normal operation.

Read all instructions thoroughly. If you are not sure about any part of these instructions, consult a qualified electrician.

TO INSTALL:

WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING! **CAUTION:** Use this device only with copper or copper clad wire. With aluminum wire use only devices marked CO/ALR.

1. Remove old switch and wallplate, if applicable.

2. Remove insulation on device (about 3/4").

3. Remove both units from package. The larger unit is the Master; the smaller unit is the Slave.

4. Temporarily connect one lead of a test lamp to grounded wall box or ground wire.

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5. Restore power at circuit breaker or fuse. Only one of the six exposed circuit wires should be "HOT." Locate that wire by touching the remaining lamp tester lead to each of the six wires separately until the test lamp lights. This is the "HOT" wire. Label the "HOT" wire (the Remote switch must go into this box).
8. Turn off power at circuit breaker or fuse.
7. Connect wires to Master per WIRING DIAGRAM as follows: BLACK lead to Line (HOT) and Remote terminal. RED lead to other Remote terminal. BLUE lead to Load (HOT). Twist strands of each end tightly together. Hold bare ends of wires together and push firmly into wire connector. Screw connector on clockwise making sure that no bare conductor shows below the connector.
8. Mount Master switch "TOP" up using mounting screws provided. NOTE: The unit will not function properly if it is mounted incorrectly.
9. Connect Slave switch per Wiring Diagram as follows: Loop wires clockwise 3/4 turn around terminal screws, Firmly tighten screws over wire loops. Terminal screws accept up to #10 AWG copper or copper clad wire.
10. Using a small blade screwdriver, remove the switch plate from the Master by prying it off at the bottom.
11. Using a small blade screwdriver, set the House Code Dial (RED) to the chosen Letter (same letter code as chosen for the applicable controller unit) and the Unit Code Dial (BLACK) to the chosen Number, thus

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8. Set the controller to transmit address P1. Using a Signal Strength Indicator, plugged in at the location of the controller, confirm that the controller is transmitting a minimum reading of 2 volts of command signal at the HI-RANGE setting. If the signal strength is less than 2 volts, have the controller checked
9. Check for adequate command signal at the Cat. No. 6381 location as follows:
 - a. Plug the Cat. No. 6385 Signal Test Transmitter into a receptacle on the same circuit as the controller.
 - b. Using the Cat. No. 6386 Signal Strength indicator at the 6381 location, check the command signal amplitude. Signal strength must be 700mV minimum. If there is less than 100mV 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 the noise must be identified and either filtered out or eliminated.

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- programming the unit with the desired address code.
12. Remount switch plate by pressing it into position. Attach wallplate.
13. Installation is complete. Restore power at circuit breaker or fuse.

NOTE: Below the actuating touch plate is a small slide switch. When servicing a controlled fixture, move this slide switch to the LEFT (OFF position). Thus will cut the power to the fixture. After servicing is complete, move the slide switch back to the RIGHT (ON position) to restore power. The slide switch must be in the RIGHT (ON position) for normal operation.

Testing Procedure

With the Cat. No. 6383 pair properly wired and powered, tap the switch plate several times to ensure that the devices are turning its load ON and OFF in response to manual control. Use the Table Top Controller or other controller to check for proper switch operation as follows (leaving the load ON manually):

1. Transmit an OFF command to the device. It should respond by turning its assigned Load OFF.
2. Transmit an ALL LIGHTS ON command to an appropriately coded controller. It (and all others on the House Code) should respond by turning its assigned Load ON.

3. Transmit an ALL OFF command from an appropriately coded controller. It should respond by turning its assigned Load OFF.
4. Transmit DIM and BRIGHTEN command. Lighting controlled should respond accordingly.

Perfect Performance Checklist

If the Cat. No. 6388 pair appear to be functioning improperly proceed with the following steps:

1. Confirm that the 6383 is wired **exactly as shown** in the Wiring Diagram.
2. Confirm that the module is being supplied from a 120V, 60 Hz AC source ONLY.
3. Confirm that the load being controlled is in proper working order. Local switch, ON. (Check for burned-out bulbs.)
4. Confirm that the load being controlled does not exceed the 500W incandescent limit.
5. Confirm that the Letter and Number codes are set correctly they should match the codes set in the Controller.
6. Confirm that the controller is powered.

IMPORTANT: If the devices still do not operate properly after following steps 1-6, the fault does not lie with the module. Proceed with steps 7 and 8.

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